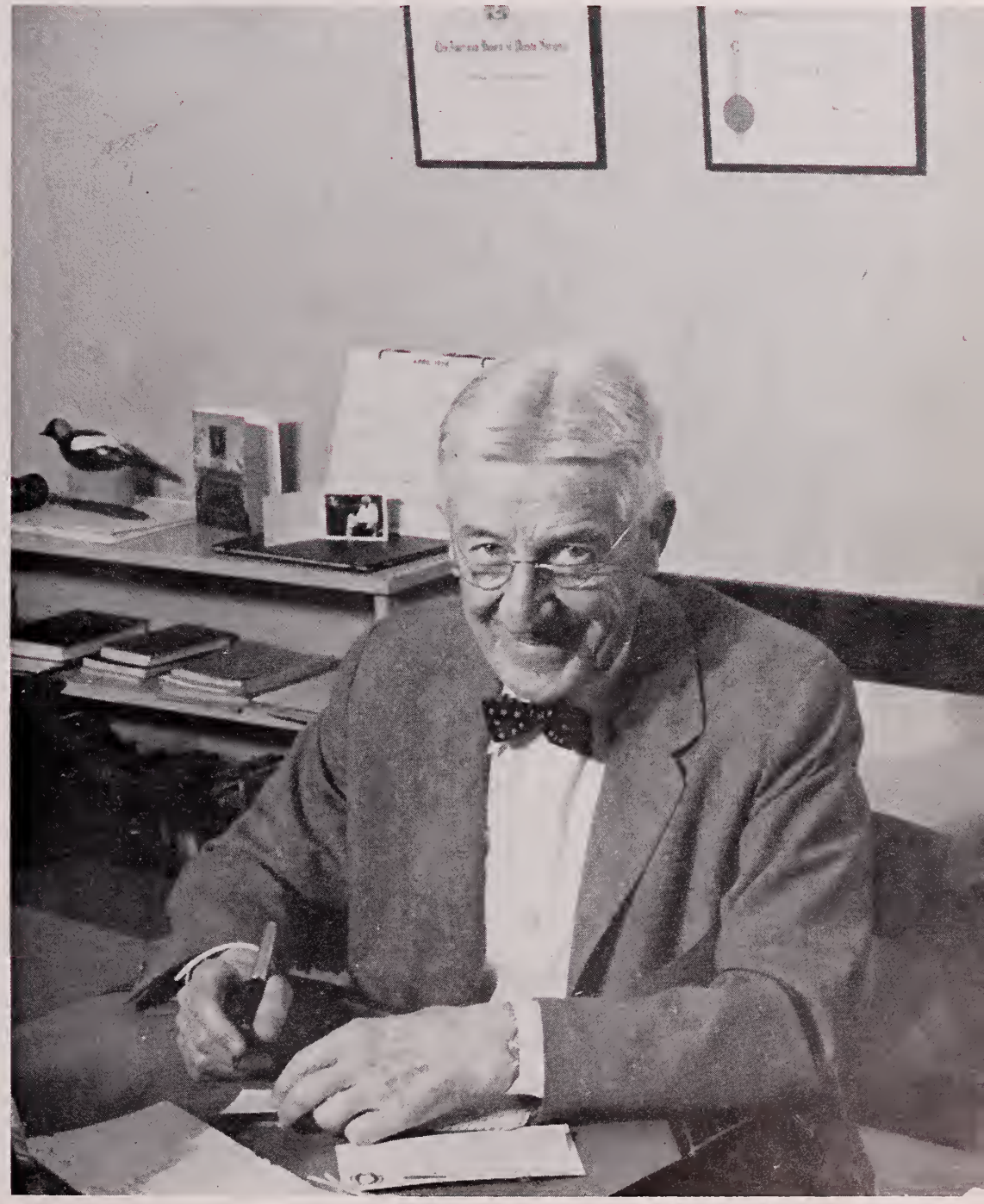
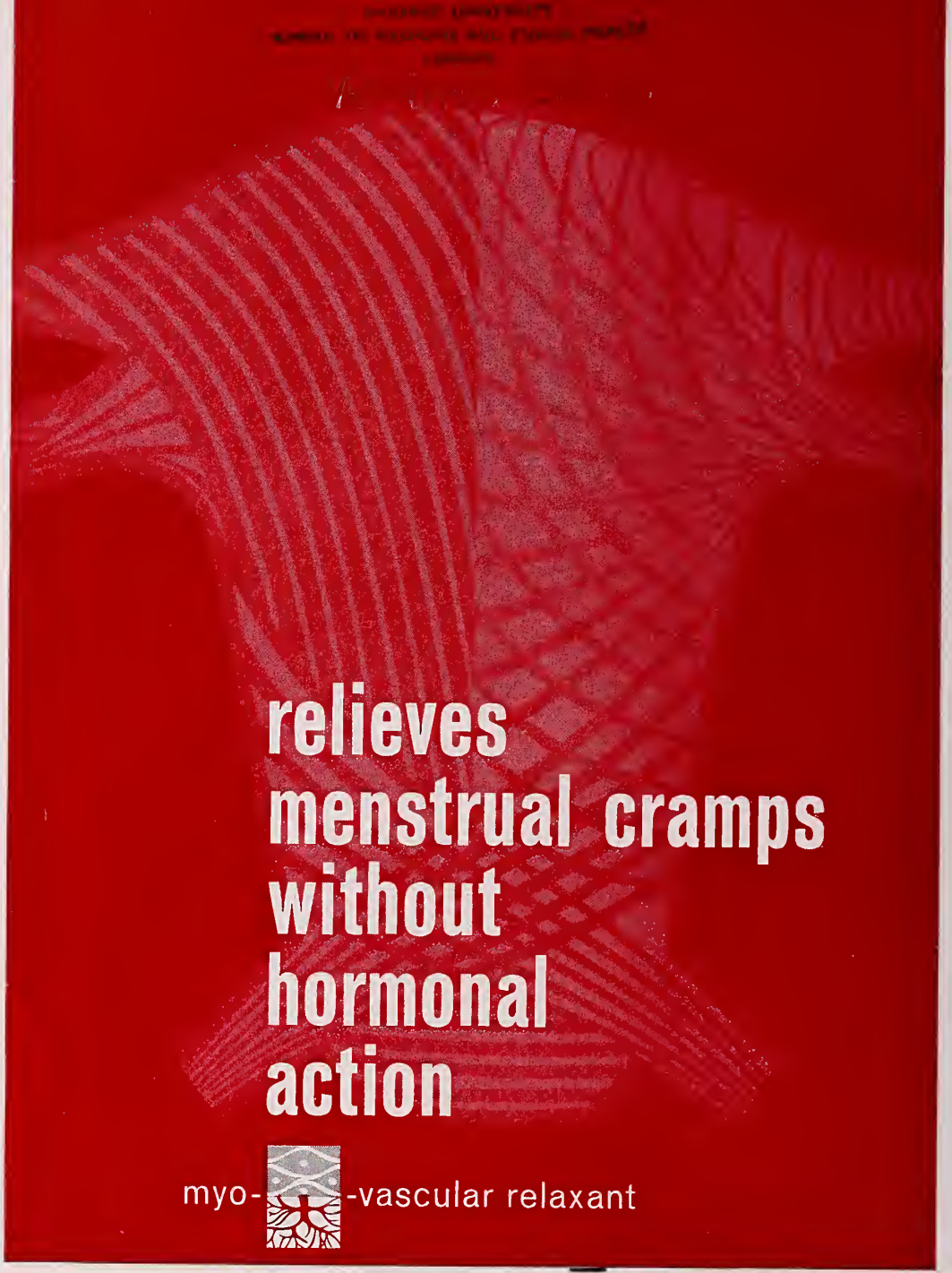
Spring, 1961

HARVARD MEDICAL
ALUMNI BULLETIN



homas H. Lanman, '16



VASODILAN®

Isoxsuprine hydrochloride, Mead Johnson

relieves uterine spasm and hypermotility by *direct* relaxant action on uterine muscle*
proved effective clinically with a low incidence of side effects*

dosage: For menstrual cramps, give 10 or 20 mg. (1 or 2 tablets) three or four times daily 24 to 72 hours prior to expected onset of menstruation. Continue until pain has been averted.

side effects: Few side effects occur when given in recommended oral doses. Occasional palpitation and dizziness can usually be controlled by dosage adjustment. Single intramuscular doses of 10 mg. or more may result in hypotension or tachycardia.

contraindications: There are no known contraindications to oral administration of VASODILAN in recommended doses.

cautions: VASODILAN should not be given immediately postpartum or in the presence of arterial bleeding. Parenteral administration is not recommended in the presence of hypotension or tachycardia. Intravenous administration is *not* recommended because of the increased likelihood of side effects.

supplied: 10 mg. tablets, bottles of 100; 2 cc. ampuls (5 mg./cc.) for *intramuscular* use, boxes of 6.

*Voulgaris, D. M.: Obst. & Gynec. *15*:220-222 (Feb.) 1960.

115R61

Mead Johnson Laboratories

Symbol of service in medicine

While they're relaxing the "Financial Cabinet" is wide awake with their securities

Relaxing under pines or palms, it's reassuring to know that your securities are always under dependable supervision back home. This New England couple, enjoying the late winter in the balmy Caribbean, find that Boston Safe Deposit and Trust Company's "Financial Cabinet" helps solve many of their problems. For example, there is no longer any need to work and worry over their investments when they travel. ☐ They know the "Financial Cabinet" is on duty—and that's enough! This is a superbly well-balanced team of experts and specialists in all phases of investment work. This group is ready to go to work for you. ☐ Discover a delightful Caribbean beach, *and* the "Financial Cabinet" for yourself! For the former we suggest a travel agent—for the latter, get in touch with us speedily at 100 Franklin Street, Boston 6, Massachusetts—telephone LIberty 2-9450.©

BOSTON
SAFE DEPOSIT AND
TRUST CO.

BOOK REVIEW

My Object All Sublime: An Intimate Biography of Sir Cedric Featheringstone-Haugh. By Derek Crane; 3 Vols., 1505 pp. New York: Humdrum House; $17.50.

By Edwin Knatchbull-Porteous

Medical circles throughout the world have long anticipated a definitive biography of the distinguished British surgeon, Sir Cedric Featheringstone-Haugh (pronounced "Faw"). This need has now been handsomely filled by a three-volume work from the pen of Derek Crane. No one, at least no one presently in touch with scientific trends, had a better opportunity than your reviewer to observe intimately the early career of the distinguished British surgeon, who is the subject of this exhaustive and most welcome study.

My earliest recollection of Sir Cedric dates back to a turn-of-the-century summer when I was visiting my grandfather at his vacation retreat at Percheron-on-Clydesdale. This, of course, was long before the birthday honors had knighted our famous neighbour, who was aestivating but a moor away. I well recall how he once caned me through the hedge following a foraging expedition of mine beyond paternal acres.

As this painstaking biography makes abundantly clear, Sir Cedric had all the attributes that make for greatness in a surgeon. They were the qualities that I, as a boy of ten, already appreciated to the full. He was quick to make decisions; he had great manual dexterity; he followed his cases assiduously. Above all, he was most thorough in applying his therapeutic armamentarium.

For some readers it will appear that the biographer has dealt in too great detail with the Featheringstone-Haugh papers, and thereby paled for the reader the vivacity of Sir Cedric's personality.

Well, for example, do I remember Grandfather telling of an occasion when he and Sir Cedric paused one misty afternoon in a pub just off Harley St. after a hard day at Guy's. When the waitress appeared, Sir Cedric ordered a sardine sandwich.

Mr. Edwin Knatchbull-Porteous was formerly curator of the Buxham Museum of Anatomy.

Sir Cedric in later years

After the girl had returned with the sandwich it was evident that she had neglected to remove the tin. "By Jove," said Sir Cedric with the barest hint of a twinkle in his eye, "you have the *carte* before the *blanche*." No one with such skill at turning a phrase could have avoided fame, even if he had never gone near a surgical amphitheatre. Grandfather, however, was quick to note that Sir Cedric was well qualified in the more subtle aspects of his calling, and often quoted, as a worthy morsel of the latter's professional philosophy, his famed aphorism, "Don't mind the bleeders, tie up the feeders."

The author has made several factual errors; in the first volume it is stated that Sir Cedric's maiden aunt on his mother's side was named Laura; her name was actually Laurie. In the second volume Sir Cedric is said to have served at Aldershot with the 27th Grenadiers when the Boer War ended, making embarkation unnecessary. In reality he served with the 29th Grenadiers. These are trifling details, but they will disturb the dedicated historian.

The author's exhaustive research has unearthed one incident of this brilliant surgeon's career unknown even to his intimates. It has long been recognized, at least among the toilers in this vineyard, that Sir Cedric's greatest contribution to the advancement of surgery was his insistence on the employment of the sharp suture needle. The sharp knife had been considered essential for years. The needle, however, had been a dull affair, and its importance little understood. The background of this development has, however, been cloaked in mystery until this publication. One day while visiting the British Museum, Sir Cedric lost his way and in hurrying through one of the reading rooms inadvertently knocked a volume from a shelf. The book, as it happened, was old English. It fell to the floor and as he retrieved it, Sir Cedric noted a passage on the open page. It read, "Soe uise ye keene naedl to heale ye greate gashe." A lesson learned under such trying circumstances was one never to be forgotten. From that time on, the sharp needle became a crusade for Sir Cedric, and he lived to see the day when his ideas were adopted not only in America but in Edinburgh.

To all who are students of surgical history these will be invaluable volumes. To anyone, such as the reviewer, who was struck at a tender age by the character of this man, they are indeed memorable. This work belongs in every doctor's waiting room. There is no higher praise.

LETTERS

To the Editor:

Though on occasion rectal examination or dilatation may indeed induce extrasystoles or even syncope from sinus standstill and straining at stool may bring about serious pulmonary embolism, I hasten to correct any impression of Leonardesque versatility conveyed by the title given for my book in the Alumni Notes section of the last issue of the *Bulletin*. It should read "Cardiac Emergencies and *Related* Disorders," rather than "*Rectal* Disorders." However, the surprising interest in the quoted title suggests that perhaps the subject as given deserves greater attention!

Harold D. Levine, '32

Thomas Hinckley Lanman

Contributions for a Memorial in his name may be sent to the Alumni Office, 25 Shattuck Street, Boston.

HARVARD MEDICAL ALUMNI BULLETIN

VOL. 35 SPRING 1961 NO. 3

The Cover: We are saddened to bring the news of the death of our Director, Dr. Thomas H. Lanman, on March 25. The portrait was made last year at Dr. Lanman's desk in the Alumni Office by David Lawlor.

Thomas Hinckley Lanman

1891 — 1961

Tom Lanman's early sociological and geographical contacts with Harvard and its surroundings were many and close. Although he was not destined to pursue a career in the arts, or to remain in Cambridge, he nonetheless learned to know Harvard more intimately than most. As an infant, he was often bounced on no less formidable a knee than that of Harvard's great President Charles W. Eliot, who was a neighbor.

Near the typical Cambridge frame house of the Charles Lanmans lived the William James family. The friendship between these two families was close, and often Professor Lanman could inscribe the books of his colleague, William James, with lines such as the following: "This volume was handed to me on a beautiful evening, the 26th of May, 1902, by 'Harry' James, son of the author, and in his father's name." An infrequent visitor at the James home, Henry James, the famous novelist, was not particularly pleased on one of his American visits to take tea with a sniffling ten-year-old Tom Lanman, who, like all small boys, was without his handkerchief.

Descended from Jonathan Trumbull, the last colonial and first federal governor of Connecticut; named for his ancestor, Thomas Hinckley, the last governor of Plymouth Colony, Thomas Hinckley Lanman was the son of Charles R. Lanman, Wales Professor of Sanskrit at Harvard, and Mary Hinckley Lanman.

Reared in, surrounded by, and breathing the Cambridge culture of the late 19th and early 20th centuries, he could not fail to be conscious of academic stature, nor oblivious to the mores of an assemblage of such prominent people. But Tom Lanman never forced his heritage upon anyone. In a quiet, unassuming way, he made major contributions in his field of pediatric surgery and came to a position of high standing in his profession. His conscience was such that he usually deprecated his accomplishments; and he acknowledged often, with a twinkle in his eye, that noble deeds are not necessarily rewarded in an ignoble world.

Tom Lanman went to Cambridge Latin School, then Harvard College, where he graduated in the Class of 1912. He was in the Class of 1916 at Harvard Medical School and proceeded through his postgraduate training at the Massachusetts General Hospital. World War I interrupted his career, and after serving as a first lieutenant in France with the Harvard Unit, he returned to Boston to enter the Children's Hospital. He and Dr. "B." Ladd represented the strength of that surgical teaching service when it was unchallenged in the new specialty of pediatric surgery. His efforts on behalf of patients with tracheo-esophageal fistula, his work with exstrophy of the bladder and his new methods of dealing with urological disorders have now become a fundamental part of our knowledge of infants and children. He began teaching at Harvard Medical School in 1928, and in 1947, became Clinical Professor of Surgery.

In 1956, he was the first recipient of the William E. Ladd Medal of the American Pediatric Society for his major contributions to pediatric surgery. Through the forties and early fifties, he held the presidencies successively of the New England Surgical, the Boston Surgical and the Massachusetts Medical Societies; and from 1953 to 1955, he was Chairman of the American Board of Surgery. His accomplishments in the surgical field brought him membership in a constellation of other societies; he was, however, particularly proud of his election as the second member from the United States of the (British) James IV Association of Surgeons.

In 1937, Dr. Lanman had written in his Reunion Report: "The First World War, as was the case for many of us, marked a turning point in my intellectual perception — if any. Although I did not realize it at the time, it meant, as the years passed, a gradual awakening to the fact that war has neither the glamour the youth of our day thought it had, nor does it settle any international problems. Certainly, as I reread my letters to my family

written in 1918 in France, I see that my ideas and ideals were decidedly immature, although probably sincere at the time. The present generation appears to be taking our old ideas of patriotism with its tongue in its cheek. I don't believe many of us would have had the moral courage in 1917-18 to join an organization similar to the recent 'Veterans of Future Wars.' No one can say now that the 'War to End Wars' proved much. I suppose that I'll join up again when the apparently inevitable next one takes place, but there will have to be a new slogan. 'Making the World Safe for Democracy' leaves me cold. My only remedy for the situation, in addition to the apparent wakening on the part of the youth of the land, is to have the munition makers, propagandists, politicians, read Hans Zinsser's *Rats, Lice and History* and serve in an evacuation hospital for a few days during an offensive. If that doesn't cure them, nothing will."

ALTHOUGH he shared doubts with many about the coming War, when it finally came, Dr. Lanman joined Harvard's Fifth General Hospital, and served in Ireland and England for almost four years. In 1944 he took over a new civilian hospital near Manchester, England, which, he said, was known as "Colonel Lanman's Convent. Our present ratio is 212 nurses to 16 patients!" From June of 1944 to the summer of '45 he was responsible for the surgical services of the 12th Hospital Center in Southern England. For this work he received the Legion of Merit. Major Frank Ross, looking back on his days in Ireland, wrote to his former commanding officer in 1950: "I have thought over many times the old days and your many kindnesses toward others and myself. I often feel that it was a special privilege to have served with you and under your command. You had a superior military hospital and yet you ran it with a spirit of affection and goodwill that permeated down through all ranks."

Following the War Dr. Lanman returned to Harvard Medical School, and from 1951, as Director of Alumni Relations, he contributed immeasurably to Harvard Medicine. Dean Berry wrote to Mrs. Lanman after Dr. Lanman's death: "To watch a creative individual build something new, to have the privilege of his understanding and interest . . . is a rare and deeply rewarding experience. Of course, I cannot tell you or your children anything about his great stature as a man, but I do want to record my everlasting appreciation for all he has done to help me. I shall never again find a friend and ally like him. Nor will the Alumni."

Although he curtailed his surgical practice and teaching during the fifties, he maintained extremely active association with the societies of which he was a member, and continued a close contact with the American Board of Surgery and the American Board of Pediatric Surgery.

Mr. Francis Hatch, a close friend and fellow member of Boston's Tavern Club of which Tom Lanman was an active member, writes:

"In the years since I met him in 1919, I have known Tom best in the Tavern Club. As a managing editor for Ted Weeks, he recently pulled together the material for the Club's *75th Anniversary Volume*. At the Tavern, however, Tom will be recalled with the greatest admiration and affection for his stature as an actor. His last appearance was in the Christmas play of 1960, a seagoing fantasy in which he steadied the entire cast. He played the part of a Uriah Heepish supercargo from Salem and drew scorn for the character, along with plaudits for his skill.

"By far his greatest role was that of Dr. Watson in Phil Rhinelander's extended sojournings into the fogs of Baker Street. So effective was he as Holmes's foil that the mother of one of his patients, after having seen him play Dr. Watson, is said to have exclaimed: 'Doctor, if I had known how slow-witted you were, I would never have let you treat my children!'

"Friendship with this modest man was always as comfortable as an old tweed coat. I found it instructive, too. I remember reporting to Tom that, in an abandoned old house in Maine, I had found and rescued two dampened volumes of William James's *Psychology*. I said that even as a layman I had found them fascinating reading. Tom explained that many of the James psychological theories, propounded long before scientific proof was available, had later been physiologically substantiated. By the next mail he sent me an article in the *Medical Bulletin* which dealt with James as scientist and lecturer, and which added immensely to my enjoyment of the book.

"At the Tavern there can be no replacement for Tom. With every rise and fall of the curtain, old-timers will see him on stage ready to deliver a line, every syllable of which can be heard in the back row."

SEEING through sham and vanity was characteristic of Tom Lanman. He was a perfect mimic (and yet not always a critical one) who exposed life's pomposities in a light-hearted manner. One can't forget his mischievous smile, nor for that matter, the mock seriousness that would spread across his face as he approached you with good news or a commendation, only to be shortly swept away by his warm smile. He had the unique ability for easy association with younger men as well as with men of his own age. For this reason younger men, as well as his contemporaries, easily sought him out for advice and steadying counsel. He was a great moderator and a strong one when the occasion demanded.

He had had ten wonderful days with Mrs. Lanman in Pinehurst, and had returned to the Alumni Office on Friday for a short day of work. He seemed cheerful and himself that day: full of warmth and friendship — as he always was. He died that Saturday, March 25.

J. R. B.

Excerpts from the

WAR DIARY OF COLONEL T. H. LANMAN

WARRINGFIELD

May 12, 1942

Walked down the beautiful Irish lane in the evening and had my first drink of Irish ale with Harry Pratt in a pub that was right out of Dickens. The ale is warm and not very strong and costs a shilling, but they give you a full pint, which is about all I care about at any one session. It is pleasant, but hasn't much authority. Interesting to talk to the natives, their accent is really much more Scotch than South Irish. Very pleasant to listen to. Nearby is one of the oldest castles in North Ireland, built I believe, before the Norman Conquest.

August 2, 1942

First inspection yesterday, which went well. I remember lots of tricks from 1918 which apparently left the impression that I knew what I was doing, and was able to see a lot of things and yet not make an issue about them. Talked with all the NCO's. I have a chance to make some at least temporary appointments, which gives them something to work for. Quite remarkable to see how these men will work for you if they think you are taking any interest in them.

The water supply here is entirely inadequate even from a British point of view. The sewage is primitive — however, we do not have any particular problem as regards flies, so I hope for the best. If we were in any part of the States in mid-summer, we certainly would have epidemics of food-borne and fly-borne disease.

A long conference with the chief nurse of the 2nd General, Miss Mutch, who, I would say, is a knockout, rather quiet, but with a lot of Scotch common sense. Suggested that the nurses under her, when off the post, wear attire which is more consistent with the Army rules! bright red slacks and yellow sweaters puzzle the local peasantry, especially when encasing a very ample figure, and that figure on a bicycle.

August 14, 1942

The system I have started here of giving passes to con valescents is working out very well and we are having much less trouble with the local populace. It is interesting to see how hard it is to get it out of the mind of the regular Army officers that if a patient is well enough to have a pass, he is well enough to go back to duty. These hepatitis patients are requiring a very long period of con valescence and, even in a civilian hospital, they would be so bored that it would be difficult to maintain discipline In any case, our trouble with the local police is now prac tically zero, since that intelligent system of giving these convalescents a little liberty has been started. The moral of the men and officers and the nurses is improving as a result of fixing up better places for amusement. Hull, o the 2nd General, has painted some really good murals o the New York Presbyterian Hospital in the officers' mess

August 29, 1942

Paul Sheldon has started his occupational therapy sho and it is proving its worth with the convalescents. Dav Moore, with the help of some convalescent line officers, starting a graded exercise program for hepatitis convales cents. They start in Class D. and as they are able to d more, are moved up through to Class A. Class A. grou takes regular exercise including a 5-10 mile hike wit equipment. If they can stand this, they are then sent bac to full duty.

My plan would be to have another intermediate step a camp at Ballymena, to which Class A. patients coul be sent early to let them complete their work there. The would not have any much greater amount of physica work but they would live under barrack conditions rathe than hospital-ward conditions, and, while under medica supervision, their immediate commanding officers woul be line officers; insofar as possible, these officers woul have been hepatitis patients. There is a very serious ga

between life in a hospital and return to full field duty and I believe this policy, and this type of convalescent camp is essential and will be much more so when we begin to have actual battle casualties (It was. — T.H.L.).

November 20, 1942

The North African Invasion has started.

November 28, 1942

We were originally sent to North Ireland because it was thought that the Germans were going to attack Southern Ireland and come up through North Ireland. Rumors are pretty hot that, now the North African Invasion has started, the place here is closing up and that the 2nd General will return to Oxford for a cross-channel invasion build-up. The only immediate problem is that of the pet dogs. Theoretically, they can't take them, but I think I can trust them to get the dogs aboard the boat without seeing them.

December 7, 1942

Four officers and twenty nurses left tonight for Oxford, Dave Moore in charge, sorry to see them go. After they were safely up the gangplank, I sent word to Dave that they really should have given those dogs more nembutal and they wouldn't have wriggled so much when they carried them over in their barracks bags. Practically all of our patients are out.

SALISBURY, ENGLAND

December 25, 1942

Have been acting as Executive officer of the 5th General Hospital in Salisbury since I left Warringfield. Lots of mail, no patients. Getting settled. Went to Christmas services at Salisbury Cathedral. Beautiful cathedral and service. Carols the evening before and dance at the Red Cross in Salisbury. Mrs. Ted Roosevelt there. Ted is over with the 1st Division and, I think, at Tidworth.

December 31, 1942

This executive officer business, I'm afraid, precludes my doing any surgery. Also, an order from headquarters at Cheltenham, which rather looks as though they were going to give me another C.O.'s job. This is rather distressing and I wish I had not done so well with the job at Warringfield.

Having wriggled out of the C.O.'s job that Cheltenham wanted to give me, it appears I have become known at Headquarters as a trouble shooter. I'm now slated to become C.O. of the 10th Station Hospital back in Musgrave Park, North Ireland. If I remember correctly it's worse than Warringfield. (It was. — T.H.L.)

MUSGRAVE PARK, NORTH IRELAND

March 31, 1943

Got things ready and left before supper for the (Belfast-Liverpool) boat for a headquarters meeting at Cheltenham.

Pleasant supper on the boat. At the same table some Polish R.A.F. officers and British R.A. Major. How the Poles hate the Germans! There is a squadron of Polish in the R.A.F. over here. They are supposed to be resting and doing only coastal patrol but they constantly make little trips over France, looking for trouble and usually finding it.

April 16, 1943

Lee Kendall arrived much to my delight to take over chief surgery. Walked in the evening with Lee and talked over various problems. Beautiful warm evening. Saw a flock of wild swan. The first I had ever seen.

April 20, 1943

Went to dinner with Consul Fuess, our U.S. Consul at Belfast, and his bride (one of our nurses) and almost put my foot in it. A Mrs. Flynn and her husband, who is Professor of Geology at Queen's were there. They seemed very pleasant except that Mrs. Flynn made some uncomplimentary remarks about the manners of the Americans. I was about to use my old argument that we must not all be judged by Hollywood and American moving pictures. Someone kicked me on the ankle so I changed the subject. Found out afterwards the Mr. Errol Flynn, who is figuring prominently in the papers in a law suit in Hollywood, is their son!

April 21, 1943

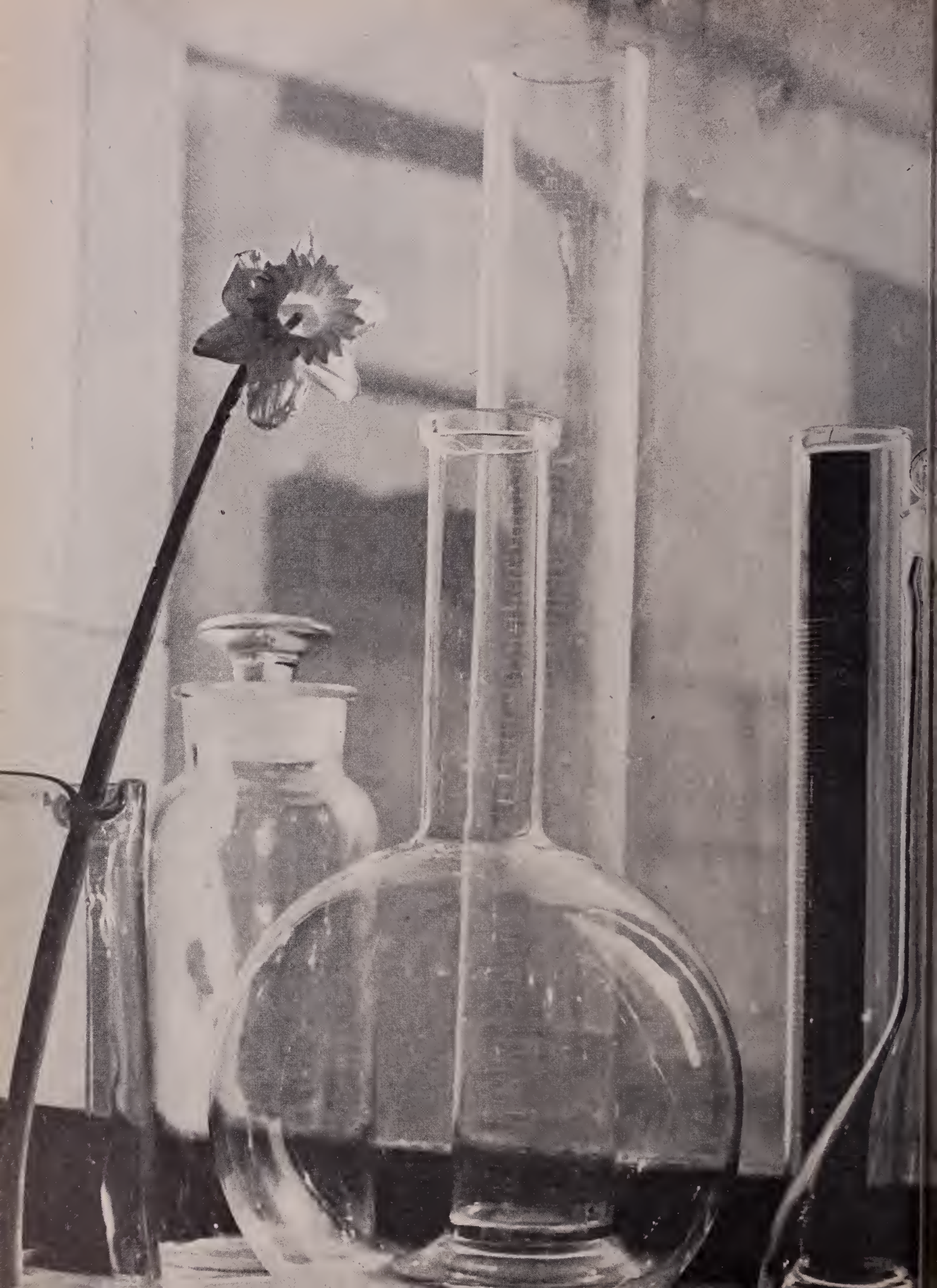
Beautiful spring day, the rhododendrons out. Drilled hard on reception and evacuation of convoys. Saw the base censor's report at H.Q. and was amused to see that the base censor had quoted one of my letters to Gert, in which I had said the situation at the 10th was improving rapidly. The G2 boys certainly get around.

Two colonels of the Inspector General Department here. They spent perhaps twenty minutes inspecting and stayed to lunch. The main kitchen is still in the process of being done over and it looks like the devil.

May 1, 1943

North African show seems to be about over.

(continued on page 54)



Herman Goslyn

←
Beakers, April sunlight, a smudgy hand on the pane, and a flower that blooms in the lab, tra la.

ALONG THE PERIMETER

The Program For Harvard Medicine

A meeting of large import took place at the Medical School on March 17, and continued into the following day. Attending were some seventy-five Alumni of both the College and the Medical School, invited by President Pusey and by Dean Berry to launch officially the Program for Harvard Medicine. (The goals of the Program were discussed in the winter issue of the *Bulletin.*)

The large crowds of Medical Alumni who attended included the Deans of Medicine at the Universities of Chicago, Pittsburgh, and Virginia, the Dean of Medicine, *Emeritus,* of Western Reserve, and the Associate Dean of Medicine at the University of Colorado.

Speakers at the two-day program included such notable figures as Edward D. Churchill, '20, John Homans Professor of Surgery and Chief of General Surgical Services at the Massachusetts General Hospital; Dr. George W. Thorn, Hersey Professor of the Theory and Practice of Physic, and Physician-in-chief at the Peter Bent Brigham Hospital; Dr. Bert L. Vallee, Associate Professor of Medicine and Director of the Harvard-Brigham Biophysics Research Laboratory, where work is being carried out on the presence of trace metals in the human system. Herrman L. Blumgart, '21, Professor of Medicine and Physician-in-chief at the Beth Israel Hospital, who stimulated the varied audience with a teaching clinic on "Cardiac Block and Standstill"; Ridley Watts, General Chairman; Laurence O. Pratt, Program Manager; Henry C. Meadow, Associate Dean of the Faculty of Medicine; and Dean Berry. After adjourning on Friday afternoon, the group met again at the Harvard Club of Boston for Mr. Pusey's dinner. He noted that the first Medical School campaign was led by Oliver Wendell Holmes in 1874. The drive was for a piddling $200,000, to be devoted to buildings and endowment money for professorships and scholarships. Nevertheless, only $125,000 of the total was raised, and of this sum, $103,000 was contributed in the first three weeks!

The last event of the two-day meeting was a Saturday morning symposium on "Moving Fronts in Bacteriology and Immunology," held for the doctors and for interested laymen. It included as speakers Bernard D. Davis, '40, Professor and Head of the Department of Bacteriology and Immunology; John F. Enders, Ph.D. '30, who discussed his recent work in the isolation of and the development of a vaccine for measles; Albert H. Coon, '37, Visiting Professor and Associate Professor Edward H. Kass.

Before Dean Berry's closing remarks, Samuel A. Levine, '14, Clinical Professor of Medicine Emeritus and President-elect of the Harvard Medical Alumni Association, in a somewhat philosophical vein, contrasted two types of clinicians; the first, for whom the doctor-patient relationship is a very close and intuitive thing; and the second the research-clinician who orients his care more in terms of his research background. Dr. Levine expressed the opinion that there is a continuing need for both types of physicians.

Reported on Friday, March 3, by Dick Levitan on WBZ News:

"Three teenaged boys' grisly sense of humor landed them in juvenile court charged with the theft of a medical cadaver, which they used to frighten motorists. Police said the trio stole the torso from Harvard Medical School and dangled it from a rope they had thrown over utility wires along Calumet Street. When a motorist approached the boys would lower the cadaver to the street, then jerk it swiftly away."

On Jan. 14, soon after Dr. Hertig's Pathology Exam, there appeared this exam (excerpted below) on the dining-room chairs in Vanderbilt.

BACTERIOLOGY - PATHOLOGY COMPREHENSIVE EXAMINATION

NAME: ..... (If you forget your name, you may use examination numbers.)

Answer not less than three nor more than five questions out of each of two of the first three parts of the examination (this does not apply to Part III, however), but do not answer less than seven questions in all (or five questions if you answer Part III). Part IV is compulsory. IT IS IMPERATIVE THAT YOU FOLLOW THESE DIRECTIONS *EXACTLY*.

TIME IS OF THE ESSENCE in this test. DO NOT DAWDLE over the directions, but proceed to the questions AT ONCE.

(Note: When the examination is corrected, not all the questions will be given equal weight. Be sure that you apportion your time judiciously.)

1. List the following items in order of decreasing magnitude, putting the smallest first but working from the bottom up:

   a. The age specific rate of new cases of endometrial carcinoma per 100,000 women in the U.S.
   b. The percent of adenocarcinomas in the corpus of the uterus
   c. The absolute cure rate of cervical carcinomas, radiated
   d. The time of arrival in Boston of the last southbound train from Fitchburg on weekdays, not including Tuesday
   e. The molecular weight of scandium

2. Which one of the following is not a practical means of control of bacillary dysentery?

   a. Magic incantations and prayer rites
   b. Elimination of all food and water from the diet
   c. Mass-scale administration of Paregoric so as to prevent defecation on a permanent basis
   d. Boiling all food in 70% alcohol or benzalkonium chloride for one hour before eating

3. The pneumococcus looks most like:

   a. A pre-Columbian arrowhead
   b. A medieval Arabian lancet
   c. A Bulgarian tea biscuit
   d. An ornamental decoration from a 19th century Kwakiutl Indian prayer altar
   e. The tip of the sceptre belonging to the Mukhtar of Abu-Gosh in 16th century Palestine

4. Transformation occurs most readily with:

   a. Dead S-II and live S-III in a live mouse
   b. Live S-III and dead S-I in a live mouse
   c. Live S-II and live S-III in a dead rat
   d. Live S-I and dead S-III in a live buffalo

5. Which is the most dangerous reservoir of psittacosis for man?

   a. Bandicoots
   b. Tetrels
   c. English sparrows
   d. Budgerigars
   e. Green Amazon couriques

YOU ARE FALLING BEHIND. Do not look back to check over your answers, but PROCEED DIRECTLY ON TO PART II.

II. In 1954, Grubnijk et al. performed an experiment to measure the effects of various hormones and uncoupling agents upon the oxidative metabolism of *E. coli*. Using an indicator which turns blue as it is reduced, and reading the results on a Klett colorimeter, they obtained the following data (expressed in Klett units):

	Zero time	*1 min.*	*15 min.*	*60 min.*	*18 hours*
Reagent blank	4	4	4	4	4
Control	4	4	4	4	4
Estrogen	4	4	4	4	4
Hydrocortisone	4	4	4	4	4

The one and only possible interpretation of this data is:

a. Klett machine unplugged
b. Light bulb burned out
c. Wrong filter in machine
d. Klett tubes dirty
e. Needle stuck
f. Bacteria dead

YOUR TIME IS NOW UP. Pass in test papers without any sniveling excuses.

Life Magazine, Esther Bubley, Photographer

President Bunting at home, with Johny and Mary

Hope for Eddicated Wimmin

Describing herself as a "geneticist with nest-building experience," Dr. Mary I. Bunting, Radcliffe's fifth president and wife of the late Henry Bunting, '36, is a champion of women who have husbands, children and excellent educations. Out of her concern for such women who have had to drop their careers midstream, Mrs. Bunting has developed the Radcliffe Institute for Independent Study. Twenty women scholars, all with Ph.D.'s or the equivalent, will be selected from the deluge of applicants, ranging from three years out of college to 70 years of age, to initiate the program next fall. Designed for women with family responsibilities who need "the final push" to get them back into professional life without neglecting their families, research will be done on a part-time basis and grants of $3,000, underwritten by the Carnegie Foundation, will be available to help with personal responsibilities, such as cleaning women and baby sitters.

An exponent of education as a lifetime activity, Mrs. Bunting established this program mainly as an outgrowth of her own experience. The wife of Henry Bunting, Professor of Pathology at Yale, she was granted laboratory space at Yale during the first years of her marriage, while her husband was teaching. Here she did her own full-time research on microbial genetics prior to the birth of her four children, and part time after they were in school. "Without that chance, I might never have progressed," she comments soberly. In the new Radcliffe program scholars will have access to the laboratories, time to complete enough paintings for a "one-woman" show, or to finish a book, and the facilities to retool themselves for teaching and research.

Viewing the Institute as a pilot study, Radcliffe hopes other colleges and universities will follow suit and adopt their own programs. Mrs. Bunting feels that if the medical schools, for instance, are truly interested in giving women an equal opportunity to become doctors, they must not make it an "either-or sacrifice," a normal life, or medicine. "The medical schools ought to seriously consider offering medical education to married women on a part-time basis, so that perhaps the M.D. would be an eight-year proposition, rather than a four," she suggests. In other areas, too, it is her hope that the responsibility will be met to salvage the nation's long-neglected talent, that of its highly educated women.

The examination on the left is the brainchild of David Sacher, '63.

Frances Burns Dies

Although many knew that Boston's colorful medical writer, Mrs. Frances Burns, had herself undergone major surgery for cancer in 1957, few were prepared for her unexpected death on February 26; for her last story appeared in *The Boston Globe* on the day of her death, and she had appeared in full vigor and evidence at the 150th Anniversary Convocation of the Massachusetts General Hospital at the beginning of the same month.

As a writer for *The Globe* over the last two decades, Mrs. Burns covered not only topics medical, but everything from Queen Elizabeth's tours on this continent, to presidential inaugurations ("terribly disorganized," she said of the latest).

Louis Lyons, who is curator of the Nieman Foundation Fellowships for Journalism at Harvard, as well as a tradition in Boston liberal news reporting, paid tribute to Mrs. Burns's skill in dealing with physicians, a group he referred to as "that sticky profession." Harvard's Director of Medical Information, Herbert Shaw, characterized Mrs. Burns as follows: "Though she was an extremely aggressive reporter, in the older traditions of journalism, we always found it a pleasure to work with Mrs. Burns. Torn as she was, at times, when in possession of exclusive information,

between her editors and her pledge to 'hold' the story in confidence for a time, she never broke her word. We trusted and admired her, not only in this sense, but to produce stories that were interesting and factual."

At medical meetings, Mrs. Burns's tousled grey head and large, rapid scrawl were familiar and reassuring. Having begun her career anew after her children were grown, she was, as Louis Lyons said, "about as close as one can come to a dedicated journalist."

Medical Coordination

A five-year training program to explore one of the most important health tasks of the future — the economic and administrative coördination of health and medical services — has been established at Harvard under a grant in the amount of $297,510 from the Division of General Health Services, U. S. Department of Health, Education, and Welfare.

The program will be administered by the School of Public Health with Dr. Robert H. Hamlin, Associate Professor of Public Health Administration, as project director.

"The need for such a training program," Dr. Hamlin said, "is reflected in the constant expansion in medical care expected in the next two or three decades. While funds have become increasingly available for medical research and for medical care, it is increasingly evident that there is a very serious deficiency of persons competent to deal with the economic and administrative aspects of medical care and with the related issues of public policy. This seems to reflect the absence of a strong training and research effort centered on these matters."

To explore these issues the Harvard program will have three major emphases. The first will be the establishment of a new graduate seminar for advanced instruction and a forum for research results as a focus for the joint participation of the various Faculty groups. This seminar is to be designed particularly for government officials, whether medical or administrative officers, who might be sent by their agencies to the School of Public Health or to the School of Public Administration for advanced training.

The second point to be stressed is the training of persons for policy-making posts, or for conducting training and research programs in the fields of economics and administration of medical care.

The third aspect is the stimulation of studies by Faculty members, graduate students, and persons brought especially to the University as research associates.

* * *

A Concert in memory of JAMES MacLAREN MARTIN

of the Class of 1962 was given in Vanderbilt Hall on March 28. Two works from the music of Mozart were performed: the Quintet in E flat major, K. 452, for piano and 4 winds; and the Serenade No. 12 in C Minor, K. 388, for eight winds. The choice of composer and the professional excellence of the playing made the memorial service a perfect tribute. Of Martin, the program said: "While he was alive he brightened all our lives. It is most fitting that we celebrate his memory with music unsurpassed in inspiration, serious but not solemn."

ANSWERS TO PAGES 36-37

Your Score: (Note — Pavlov does not count)

10-12: *Why did you cheat?*

5-9: *Cum Laude!*

1-4: *Are you sure you graduated from Harvard?*

Top, left to right:

Harvey Cushing, Moseley Professor of Surgery, 1912-1932; **Henry J. Bigelow,** Professor of Surgery, 1849-1882; **Charles E. Brown-Séquard,** Professor of Physiology and Pathology of the Nervous System, 1864-1867; **Benjamin Waterhouse,** Hersey Professor of Theory and Practice of Physic, 1783-1812; **Dr. Ivan P. Pavlov,** with **Walter B. Cannon,** George Higginson Professor of Physiology, 1906-1942.

Bottom, left to right:

Thomas Dwight, Parkman Professor of Anatomy, 1883-1911; **Lawrence J. Henderson,** Professor of Biological Chemistry, 1919-1934, and Abbott and James Lawrence Professor of Chemistry, 1934-1942; **Oliver Wendell Holmes,** Parkman Professor of Anatomy and Physiology, 1847-82, Dean of the Medical School, 1847-53; **George Richards Minot,** Professor of Medicine, 1928-48; **James Jackson,** Hersey Professor of the Theory and Practice of Physic, 1812-1836; **Henry Pickering Bowditch,** left, Professor of Physiology, 1876-1906; Dean of the Medical School, 1883-1893, with **John Collins Warren,** Professor of Surgery, 1893-1907.

The Student-Faculty Committee
Evening Discussion Series

presents

A PANEL DISCUSSION ON MEDICAL EDUCATION AT HARVARD — LIBERAL OR TECHNICAL

Charles A. Janeway, M.D. '61
William McDermott, M.D. '61
Francis D. Moore, M.D. '61
David D. Rutstein, M.D. '61
John Urquhart, M.D. '61
Kenneth I. Shine, M.D. '61

March 15, 1961

Vanderbilt Hall Common Room

Above: A strange placard appeared on various bulletin boards around the Medical School. It caught our eye. "Inside H.M.S." reveals the truth about this display of conformity!

Inside H. M. S.:

Trade-School or University Medicine:

"I only took the regular course,"
said the Mock Turtle, "Reeling and
writing, of course, to begin with . . ."

Lewis Carroll

The "regular course" of medical education is the subject of a current series of evening discussions sponsored by the Student-Faculty Committee. The liberal versus the technical approach to medicine was the most recent topic in the program. As one discussor expressed it, "Which trend is more profitable: the hospital-oriented or the university-oriented medical school?"

The panel included Kenneth Shine, Student; John Urquhart, Surgical Resident; Francis Moore and William McDermott, Surgeons; David Rutstein, Preventive Medicinist; and, as moderator, Pediatrician Charles Janeway.

Shine the Student was quick to applaud the philosophy of free time, and proposed the now familiar idea of clerkships for the third year instead of the fourth. He also urged earlier full-time exposure to clinical actualities. The proposal for more free time was heralded by a modest roar of audience approval.

McDermott, the Surgeon, stepped forward as advocate of the hospital trade-school, which would teach the mechanics of doctoring after a full four years of university medical school, the latter having no more than the broadest mandatory course.

Reactionary Resident Urquhart, decried a medical education (presumably his own) so liberal that a student would read renal angiograms before ever seeing a catheter. Not unexpectedly, Surgeon Moore interposed at this point to introduce a new and radical approach to the whole curriculum; only a few other enlightened surgeons, he indicated, seemed willing to listen to him. This involved an accelerated program of basic science in the first year, including pathology; then, in the second year, clerkship to follow an introduction to physical diagnosis; and then, a "return to science" (research) to occur in the third year. It is during the third year that the student, having been puzzled in the second year by remarkable incidence of primary amyloidosis at the Massachusetts General Hospital, spends a year in the lab, investigating either amyloid, or the MGH. "As far as I'm concerned," Moore ended, "the fourth year should be replaced by internship."

Rutstein, the Preventive Medicinist, returning to the question of free time, wondered what and whose time was to be freed to free more time; he noted the healthy aspect of a certain restlessness among educators, *even* in medicine. He reasserted that the success of the new integrated curriculum depends upon its integration in the minds of faculty, and students, rather than in the catalog.

A faint voice from the assemblage plaintively asked what had happened to the *Teacher?* The reflective and somewhat nostalgic pause which ensued, however, allowed Moore to regain the floor and summarize his program of fundamental science, wherein a few responsible lecturers might handle the entire teaching load, rather than a horde of now-you-see-'em-now-you-don't instructors, who deliver their lectures while carrying a direct line to the lab. Another student objected to Moore's third-year "return to science" program. "I mean," he said, "people keep telling me I want to go back to the lab, go back to the lab, go back to lab; but the truth is, I really don't *want* to go back to the lab." Modest applause. Thereat, the discussion ended amicably.

Such a stimulating panel raised one question: While liberalizing of the program seems ideal to many, how flexible can a program be and still turn out graduates capable of treating sick people? Assuredly, the era of the cast-iron curriculum is passing — clankingly — that curriculum which graduates a student precisely because of what he has been taught, rather than what he has learned. Second, change for the sake of change need not be feared. The whole of medical school philosophy is rather zealously guarded by the sum of its parts, semi-autonomous departments that wish to maintain their integrity. No department discourages expansion of the curriculum, but the sacrifice of department lecture time to allow shifts in program emphasis is not readily made. You see, the course, in reeling and writing, cannot possibly be presented in twenty-eight lectures rather than thirty.

Pepper Davis, '63

David Lawlor

Let them eat cake! Harvard Medical School feted Dr. Gaetano Martino with a cake full of flags. Each flag represented one of Italy's 22 medical schools.

From Salerno to Harvard

Even Napoleon III would have felt there was enough Italy to go around when the Harvard Medical School baked a jolly cake in honor of Dr. Gaetano Martino, Chief of the Italian Delegation to the United Nations. The luncheon at the Harvard Club on March 24 also honored the 100th Birthday of Italy's unification.

Dr. Martino, formerly Italian Minister of Foreign Affairs, is also Professor of Physiology at the University of Rome. There was a particularly convivial note to the gathering, and those of the true faith were obviously celebrating the movement of medical scientists into their rightful positions of political power in Italy. Dr. Guido Majno, Associate Professor of Pathology at H.M.S., musician and author of discernment and wit, hosted Dr. Martino during his visit to the Medical School and was reported at the luncheon to have offered Dr. Martino all of Sicily. Dr. Majno, having already as a medical student at Milan come under the influence of Dr. Martino's textbook on physiology, appeared to shift easily from medical collaboration to political intrigue.

Let us now quietly draw the curtain on these intimate details of medicine and politics and leave this luncheon with its innocent and festive cake, so that those who were present may reveal the full story in their memoirs.

New Appointments

Dr. Grete Lehner Bibring has been named Clinical Professor of Psychiatry on the Faculty of Medicine of Harvard University. An internationally-known practitioner and teacher of psychiatry and psychoanalysis, Dr. Bibring is psychiatrist-in-chief at the Beth Israel Hospital in Boston and president-elect of the American Psychoanalytic Association. Since the receipt of her M.D. degree from the University of Vienna in 1924, Dr. Bibring has concentrated her research and teaching studying the psychologic reaction to environmental pressures and demands.

Dr. Harold Frederick Schuknecht has been appointed the sixth Walter A. Lecompte Professor of Laryngology at Harvard. As such he will also be Chief of Otolaryngology at the Massachusetts Eye and Ear Infirmary. Since 1953, Dr. Schuknecht has been associate surgeon and director of the Otological Research Laboratory at the Henry Ford Hospital in Detroit. Internationally known for the "Schuknecht Operation," he developed this procedure to alleviate deafness by means of surgically removing the stapes, one of the fine bones in the middle ear more commonly called the stirrup, and replacing it with a metal part. Born in South Dakota, Dr. Schuknecht received his B.S. from the South Dakota School of Medical Sciences in 1938 and his M.D. from the University of Chicago in 1940. As Walter Lecompte Professor, he succeeds Dr. LeRoy A. Schall who became *Emeritus* in 1960.

Dr. Philip Edward Meltzer has been appointed Clinical Professor of Otology at Harvard Medical School. Since July 1960, he has been Acting Head of the Department of Otology and Laryngology at Harvard and Chief of Otolaryngology at the Massachusetts Eye and Ear Infirmary. Dr. Meltzer's contributions to his field include the refinement of the fenestration operation for the relief of deafness and the development of a technique for the removal of adenoid tissue from the nasopharynx in children. A native of Boston, Dr. Meltzer received his D.M.D. in 1915 and M.D. in 1918 from Tufts University.

Honors

Three H.M.S. alumni, John R. Blinks, '55, G. Daniel Copeland, '49 and John A. Mannick, '53, are among 25 national Markle Scholars in Medical Science selected by the John and Mary R. Markle Foundation of New York. The purpose of the Markle program is to relieve the faculty shortage in medical schools by giving young teachers and investigators academic security and financial assistance early in their careers. Dr. Blinks, Associate in Pharmacology, is at H.M.S.; Dr. Copeland, Instructor in Internal Medicine, is at the University of Tennessee College of Medicine, and Dr. Mannick, Instructor in Surgery, is at the Medical College of Virginia School of Medicine. Each of the 25 schools, where a Markle Scholar will work, receives $30,000, at the rate of $6,000 a year for five

years, to help support the Scholar and his research. This foundation was established in 1927 by the late John Markle, a Pennsylvania coal operator, "to promote the advancement and diffusion of knowledge . . . and the general good of mankind." The appointments are effective in July '61.

Richard M. Smith, '07, Thomas M. Rotch Professor of Pediatrics, received the Rogerson Award at the annual meeting of the United Service Committee on April 3. Before some 550 health and welfare leaders of Metropolitan Boston, Dr. Smith was presented the award by the president of U.S.C., Edward L. Bigelow. Named in honor of the founder of the old Community Fund in Boston and first recipient of the Award, Charles M. Rogerson, this presentation is not a yearly event but is made only when there is a Committee member who has "rendered outstanding civic services in the field of health and welfare." The Award has only been given seven times. A well-known Boston pediatrician, Dr. Smith is the founder and former president of the American Pediatric Society, consultant to the U.S. Children's Bureau and has been, for seven years, chairman of the Health Division of the United Community Service, the planning headquarters for health and medical care in Greater Boston. In March another honor was accorded Dr. Smith when friends and colleagues gathered at the Children's Hospital for a cocktail party in honor of his 80th birthday.

Fifteen outstanding alumni of the Massachusetts General Hospital, fourteen of whom are also alumni of H.M.S., received citations and commemorative medals at the Hospital's 150th Anniversary Convocation. The awards were given by Dr. James M. Faulkner, President of the Association and Acting Director of the Boston University-Massachusetts Memorial Hospital Medical Center to the following:

Fuller Albright, '24, former Associate Professor of Medicine at H.M.S., and member of the Board of Consultation at the M.G.H.; Henry K. Beecher, '32, Henry I. Dorr Professor of Research in Anesthesia, H.M.S., and Director of Anesthesia and the Anesthesia Laboratory at the M.G.H.; Edward D. Churchill, '20, John Homans Professor of Surgery, H.M.S., and Chief of the General Surgical Services at the M.G.H.; Frederick A. Coller, '12, Professor of Surgery, *Emeritus,* and Chairman, *Emeritus,* of the Department of Surgery, University of Michigan; Joseph Garland, '19, Editor of the *New England Journal of Medicine,* member of the Board of Consultation of the M.G.H.; Rodolfo Herrera, '42, Chief Surgeon and Director of Centro Medico and Clinical Professor of Surgery at the University of San Carlos, Guatemala City, Guatemala; Chester M. Jones, '19, Clinical Professor of Medicine, *Emeritus,* H.M.S., and a member of the Board of Consultation at the M.G.H.; Robert R. Linton, '25, Assistant Clinical Professor of Surgery at H.M.S., and a member of the Board of Consultation at the M.G.H.; James Howard Means, '11, Honorary Physician at M.G.H., Jackson Professor of Clinical Medicine, *Emeritus,* H.M.S., and former Chief of the Medical Services at the M.G.H.; Joe Vincent Meigs, '19, Clinical Professor of Gynecology, *Emeritus,* H.M.S., former Chief of the Vincent Memorial Hospital, Consulting Visiting Gynecologist at the Vincent, and Consulting Visiting Surgeon at the M.G.H.; Francis D. Moore, '39, Moseley Professor of Surgery, H.M.S., and Surgeon-in-Chief at the Peter Bent Brigham Hospital; Walter G. Phippen, '04, President, *Emeritus,* of the Staff and former Chief of the Surgical Service at the Salem Hospital; Dr. Joseph Stokes, Jr., Professor of Pediatrics at the University of Pennsylvania School of Medicine and Physician-in-Chief at the Children's Hospital in Philadelphia; Paul D. White, '11, Honorary Physician at the M.G.H. and former Clinical Professor of Medicine at H.M.S.; Robert F. Loeb, '19, Bard Professor of Medicine, *Emeritus,* at Columbia University and Consultant to the Presbyterian Hospital in New York.

Words they have used too much:

For some time now, the **impact** of changing trends has been felt by the **disciplines** of medicine and surgery. Out of the **wellspring** of modern education, rises the **image** of **moving forces, advancing the frontiers** of medical education. In its **wisdom,** medicine should seek the **indivisible triad.**

Regional Activities

WEST COAST

Samuel Levine, '14, President-elect of the Alumni Association, made a tour in April of H.M.S. strongholds on the West Coast. A series of regional meetings given in his honor began in Seattle, Washington, under the auspices of Alexander H. Bill, '39, and cohorts. Dr. Levine was speaker at a dinner meeting there and guest at grand rounds at the University of Washington. On to Portland, Oregon, where the greeting committee was led by John P. Trommald, '33. A tour of Oregon Medical School was planned and dinner followed at the University Club. Herbert Moffitt, '41, and colleagues entertained Dr. Levine in San Francisco with dinner at the Mark Hopkins and a clinic at the San Francisco General. Last stop was was Lowell F. Bushnell's home-town, Los Angeles, where Dr. Levine attended clinics at the Los Angeles County Hospital and dinner at the Sheraton-West Hotel. Then jet nonstop back to Boston on April 29.

NEW YORK

The Harvard Medical Society of New York met at a dinner in the New York City Harvard Club on April 6. A short business meeting was planned for the election of new officers. The speaker of the evening was the Editor of the *Saturday Review,* Mr. Norman Cousins.

THE NEW SIX-YEAR PROGRAM OF MEDICINE AND LIBERAL ARTS AT BOSTON UNIVERSITY

A Sister Institution's Program of General Education with Medicine as a Major

Lamar Soutter, '35, Dean, Boston University School of Medicine

IN 1955 Dr. John Bugher, then Director of Medical Education and Public Health of the Rockefeller Foundation, approached Boston University School of Medicine to see if its faculty would be interested in developing an abbreviated medical curriculum. The faculty was more concerned with improving the curriculum than shortening it, but expressed a willingness to investigate the period from secondary school graduation up to entry into medical practice. Under a grant from the Rockefeller Foundation a small committee from the School of Medicine and College of Liberal Arts began a study of the problem. Initially only the portion of the educational period under university control has been considered for study. Postdoctoral training was left for a later date.

AFTER studying existing medical and liberal arts curricula and secondary school education both here and abroad, we decided that the span of education under university control could be improved by setting up a program combining liberal arts and medicine. We also thought time might be saved if repetition were avoided and if some courses were given in the summer.

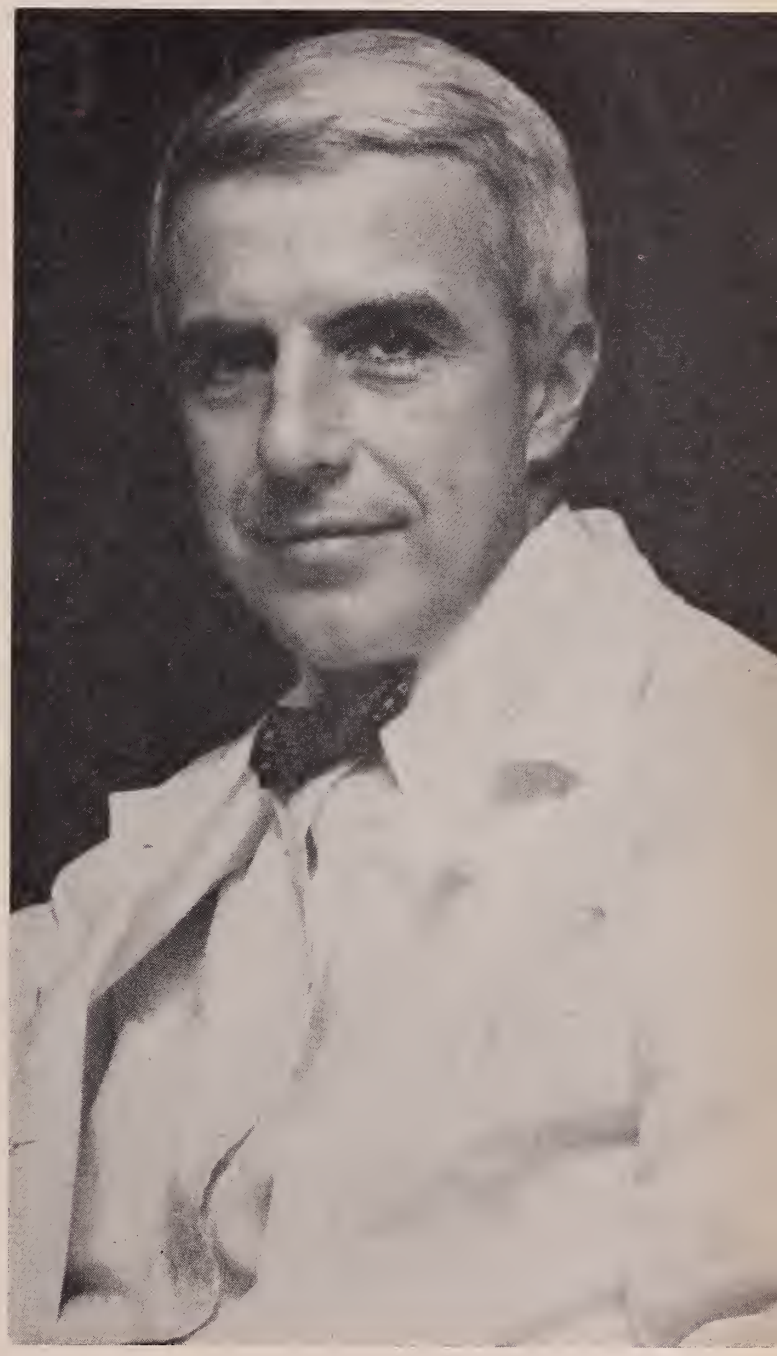
In planning the curriculum, several advantages became obvious. The first was that such a combined program would provide a measure of academic security so that students could think in terms of educational values rather than using courses as strategic steps toward admission to medical school. Nowadays, despite excellent advice to the contrary, most premedical students major in science courses, not out of preference but to impress an admissions committee, and to obtain a good score in the science section of the Medical College Admission Test. Furthermore, they often insist on taking courses in physiology, biochemistry, bacteriology, histology, and so forth, in college with the hope that when they repeat these courses in medical school their marks will be high. Both processes interfere with a broad college education and with the pursuit of an interest to some depth in a field which is stimulating.

If a student is admitted to a six-year combined course,

A REARRANGEMENT OF THE CURRICULUM IN THE PRECLINICAL YEARS AT HARVARD

A Backward Look after Four Years of Trial

George Nichols, Jr., M.D., Assistant Dean for Curricular Affairs



IN the April 1957 issue of this *Bulletin,* an article appeared entitled, "A Rearrangement of the Curriculum in the Preclinical Years at Harvard." Its author, Dr. Manfred L. Karnovsky, then Assistant— now Associate — Professor of Biological Chemistry, had served for three years as chairman of the *ad hoc* Committee on Curricular Arrangements for Preclinical Teaching and Integration with Clinical Teaching. The appearance of this article was rather a momentous occasion. Not only did it represent the culmination of three years of hard work by many people who had devoted a large amount of time to a careful survey and appraisal of the teaching of preclinical sciences at Harvard Medical School, but in addition it laid before the Alumni the general plan and underlying philosophy of the first major revision of the curriculum to be instituted in the Medical School in many years. At that time, Dr. Karnovsky wrote anticipating future events. Now, four years later, the time is ripe for a backward look.

THE title of the first article has been deliberately repeated here, since this is a second in a series, if you like, an interim report of experiments in progress. It is particularly important to think of this paper as interim, for arrangements and contents of curricula are human institutions reflecting current thought. It is important to emphasize that, unlike good experiments in the laboratory, changes in curriculum can never be evaluated by comparison with adequate controls. As the experiment progresses, the controls change. Students educated under the old system are no longer available for two reasons: first, the old system no longer exists; and secondly, the students who took the courses under the old system have passed on to their careers. All that is left is the memory of the teacher concerning the performance of individuals who have long since gone, under a system whose details, advantages, and disadvantages are increasingly hazy memories. It is for these reasons that this article is entitled "A Backward Look" rather than "An Evaluation," since an objective appraisal in hard and fast terms will never be possible.

DR. SOUTTER

he is already in medical school; he takes no Medical College Admission Test; he has no admissions committee to impress; he needs only to perform well academically to progress through the school; and if he is properly guided, he will pursue an academic interest to some depth as well as obtaining a broad education. This, of course, depends on a flexible curriculum which includes electives. As presently set up there are 25 semester hours for electives, including a full half-year in the final year of the program. In addition, students will be permitted to take an extra year of liberal arts or research at any time after the fourth year.

Another appealing aspect of the curriculum is the uninterrupted progression, particularly in the natural and social sciences. At present most premedical students take a course in chemistry at high school, repeat it with a somewhat better course at college, then often after a year's interruption, take organic chemistry when they are juniors, followed by another year's interruption before taking biochemistry at medical school. In an integrated program for which students will be selected on the basis of excellent secondary school courses (of Advanced Placement stature), their introduction to college chemistry need only have a brief review period. The students will have a higher aptitude than those usually taking a primary college course, and will be able to proceed more rapidly. We hope to incorporate some quantitative analysis and elements of physical chemistry into this initial course. It must be pointed out, however, that special courses can lose their broad cultural value if their content is restricted to elements directly related to medicine. This is a fault of some of the premedical courses at the University of London, and we have made every effort to avoid this restriction.

IN the second year the students will take organic chemistry in a slightly more advanced form than the usual college course; in the following year they will take biochemistry. It is hard to say what the "half life of knowledge" is, but certainly interruptions in learning necessitate repetition and interfere with progress.

Physics will again be an advanced course and will have good cultural values. The relationship of physics to medicine will, however, be emphasized by using medical examples, where applicable, to illustrate physical principles. For example, the operation of the fulcrum could be illustrated by muscle pull on bone, or optics by a study of the lens of the eye.

At many colleges, biology is taken to satisfy a distribution requirement by those who are disinterested in science and not very able. In the new program we shall be dealing with an excellent group of interested premedical students so that fewer tedious hours need to be invested in comparative morphology, and more time can be put into basic principles of physiology, genetics, ecology, and development.

When the program for the social sciences was designed, considerable cooperation was needed between the medical school faculty and the social sciences departments of the university. We wanted not only to improve the student's background in these areas as they affect medicine, but also to develop his interest in being a responsible member of society and in understanding the place of medicine in the social system. During the summer after the first year students will have one course each in social anthropology and government. During the following winter they will take a special course in philosophy which will include some ethics. Simultaneously they will be taking a course in normal psychology.

FROM the start of the third year on, students will study medicine in the winter and liberal arts in the summer. Psychiatry will be taught in each of the last four years. In addition, during the summer of the fifth year students will take a seminar course on the relationships between medicine, public health, and society.

Our colleagues in the College of Liberal Arts were very careful to avoid restricted vacations or heavy course loads which might overwork the students. At least a month will be free each summer, and in some years more, in addition to the Christmas and Easter holidays. In whole, the program contains 96 semester hours of required liberal arts curriculum, with most of this in the first two years. In addition to the courses mentioned above, the students will take literature, history, statistics, and studies in the history of science and medicine. Almost a whole year of time is saved by avoiding the repetition of good secondary school courses in English, physics, mathematics, and chemistry, and by the employment of certain expedients on an experimental basis. No course in English composition will be taken but all papers written in literature, history, philosophy and biology will be marked on their use

DR. NICHOLS

WHAT needs to be done, then, is to review the aims outlined by Dr. Karnovsky four years ago and examine to what degree these have been realized when seen in the perspective of four years of trial. Second, the problems which have arisen in the course of living with these different arrangements need to be summarized. Finally, the benefits which have accrued from the change should be looked at from both the faculty and student viewpoint.

Some of the considerations which guided the *ad hoc* committee in designing its plan were as follows: As a guiding principle, the committee believed that the strength of individual departments should be preserved. As the boundaries between the basic medical sciences became less clearly defined, it was felt to be of paramount importance that students become aware of the philosophy, methods and contributions of the separate established disciplines and use these as a foundation on which to build their future careers. However, certain changes in the arrangement of material, it was believed, might lead to better opportunities for students to integrate contributions from different disciplines toward the understanding of topics (such as the structure and function of an organ system) in human biology. The belief was strongly held that some decrease in the *amount* of material taught didactically should be an aim of any rearrangement. The time thus made available would then be free for the student to pursue independent reading and inquiry in the library or laboratory. It was thought that through the medium of interdepartmental collaborative teaching centered around topics, interdepartmental discussion, and exchange of ideas would be encouraged and a better appreciation of the contributions, ways of thought, and methods of different disciplines might be developed in the faculty, especially among its younger members. Finally, it was felt important to preserve time for Faculty members to pursue their individual research, the conviction being that the teacher who is at the same time a productive scholar brings new zest to his teaching.

The committee designed its program with an eye to realizing these aims to the greatest possible extent. In the first semester of both first and second years, the principles of the various disciplines are presented by departments, as departmental courses. Thus, in the first year, the first semester includes a course in gross anatomy not greatly changed from the past, and much shorter courses in histology, physiology, and biochemistry, designed to acquaint the student with the fundamental principles of these disciplines. Simultaneously, these courses should indicate the particular manner in which a biochemist, histologist or physiologist approaches a problem in biology.

In the second semesters, teaching is organized around topics. Thus, in the first year the Departments of Biochemistry, Physiology and Anatomy collaborate in teaching as a team topics centered in three general areas. One, for example, deals with the body fluids and the regulation of their composition and volume. This comprises lectures and laboratory exercises designed to illustrate the physical chemistry of the blood and other extracellular fluids and the function of the kidney and lung — organs responsible for the maintenance of the constancy of the internal environment. Another area is organized around the teaching of the anatomy, physiology and chemistry of the nervous system, while a third deals with the gastrointestinal and endocrine systems in the same fashion.

Emphasis in the first year is toward an understanding of normal human biology. In the second year, courses in pathology, bacteriology, and pharmacology in the first semester and an integrated course in pathophysiology* in the second semester, are designed to develop in the student an understanding of abnormal human biology and disease.

Two additional features are included: first, a tutorial system for the first year student designed to supply for each a faculty member to advise him with his problems and guide him towards a better understanding of the aims of his basic science courses; and second, a course in Growth and Development designed to include genetics, embryology, and somatic and psychic development.

SEVERAL questions now need answers: First, to what degree were the original principles laid down in 1957 adhered to in the implementation of these curricular rearrangements? Second, what changes have proved to be necessary on the basis of experience? Finally, is it possible to say with any degree of objectivity that the student of 1961 is any better prepared for his career by this system than was the student of 1956 under the old system?

Simple as these questions are to pose, the answers are much more difficult to find. Indeed, these become increasingly difficult as one progresses down the list until answers to the final one are impossible to supply on any sort of objective basis. The best one can do is to report a summary of stated opinion, fully realizing that at best this is a reflection of those who have given the opinions.

**Combining special pathology of individual organ systems, pertinent pharmacology, laboratory diagnosis, and elements of medicine and surgery.*

DR. SOUTTER

of English, style, and rhetoric. A proficiency examination in English will be taken at the end of two years. This method of teaching English has worked successfully at Brown.

No foreign language course will be required; instead, two years of a language must be taken before admission. Students will be divided into language clubs of no more than 20 members. Each club will meet once a week during the first four years for dinner and to hear and discuss a paper on some aspect of the culture of the nation concerned. Students will converse entirely in the language of the club. It is expected that this method will make a student fairly fluent in a foreign language by the end of four years, as well as giving him some knowledge of the history, literature, and customs of another people.

Appreciation of art will be offered as an alternative elective to a second course in literature. Creative art will be taught in the evening during the winter months for those who desire it. This system has been tried successfully in one of the Harvard houses.

Advanced mathematics will be elective for those requiring it for research. Some calculus will be taught as part of the physics and the chemistry courses, but not enough to deter from medicine the able young man who is not mathematically minded, but is otherwise desirable as a physician.

Some of the students may prove to be unsuited for a career in medicine. At the end of the first two years they will be dropped out to pursue their studies for an A.B. degree and then may, if they choose, enter a four-year curriculum at our school or elsewhere. They will be replaced by graduates of four-year college courses, so that a class starting with one hundred students might lose thirty at the end of two years, but would again be up to a hundred at the beginning of the first medical year of the program. It is planned to have a tutorial system, with the students meeting once a week in groups of four with a tutor who will be responsible for their academic adjustment and intellectual development. The premedical and medical parts of the program will have separate tutors. In addition, each student will have a personal advisor from the medical faculty who will be paid to act as an older friend and advisor. Each advisor will have only one student per class.

Lastly, in order to give the students more intimate contact with the faculty, a residence will be built along the lines of the Harvard houses. It will be built in three towers connected by a common base. It will be open to male, female, and married students, interns, residents, and some faculty members. It will contain rooms for tutorial activities, meetings of the language and other clubs, and classes in creative art. Probably a third of the student body will live in it; the rest will attend functions there. Some athletic facilities, a general library, and a large room for meetings and functions will be included. Rooms will be available where visiting professors can stay.

The medical part of the program has been altered by increasing the portion of time devoted to seminars and symposiums as contrasted with the present lecture schedule. More exercises will be devoted to promote integration among the basic sciences and between them and the clinical sciences. Lastly, there will be periods of review and advanced study in all of the basic sciences except anatomy during the final year to insure that the young clinician will have basic principles thoroughly in mind when he enters training.

The medical portion of the program is still under study and subject to revision, and hence cannot be described in great detail at this time. Although the first class of students will enter the College of Liberal Arts in the Fall of 1961, they will not reach the medical school for another two years, so that time is available for an unhurried revision of the medical curriculum. Students will obtain both an A.B. and M.D. degree at the end of six years. The program is experimental in nature and may require considerable tailoring. An evaluation will be made of teaching methods on the basic sciences as well as a comparison of the effectiveness of our present courses with the new ones. Sociological studies of changes in student attitudes as they progress through the school will also be made. Whether or not we can find effective methods of determining what the new program will accomplish remains to be seen.

The Editorial on the following pages attempts to place in national and international perspective some of the changes in medical education described in these articles.

DR. NICHOLS

Certain general comments can be made, however, concerning the degree to which the aims of the committee in designing the program have been realized. It can be quite categorically stated that the departments continue to exist as strong entities in the Quadrangle. Although some hold the opinion that the division of material between formal departmental courses in the first semester, and integrated programs in the second have weakened the impact of departmental teaching upon the student, it is abundantly apparent to anyone living in the environment that Departments continue to be Departments in the most classic sense. They continue to vie for student time, attention, space, and for an opportunity to make their opinions known with as much gusto as ever.

Second, the implementation of integrated teaching in the second semester has made it possible to place in juxtaposition materials dealing with a single topic or organ which were previously widely separated by time under the old block system. This has reduced the amount of repetition necessary, and by this means, some time is saved. Whether such juxtaposition of material makes it easier for the student to integrate information concerning a given organ drawn from a number of disciplines is, of course, moot. It is hard to see, however, how the integrated arrangement could make this process any more difficult, and it seems likely, at least from student commentary, that it has been made easier.

Another point strongly emphasized by the committee was the need to trim material from the curriculum in order to provide more free time for the students. In this instance, experience has indicated that the committee was overly optimistic concerning the willingness of individuals to teach less about their favorite subjects. Certainly, some materials previously given considerable time in the curriculum no longer receive major attention. On the other hand, it is abundantly apparent that under the new arrangements considerably more material is taught than in the past. Free time which was so earnestly endorsed is no longer present in the liberal amounts originally envisioned. In the first semester of the first year, indeed, free time is almost nonexistent. However, in the integrated teaching of the second semester, thanks to rotation in laboratories, some time is available to the student for individual reading. In the second year, free time has been preserved in much better fashion so that in the second semester every student has at least two half days per week to pursue his individual interests.

RETURNING to the positive side of the ledger, it seems fair to state that another consideration which guided the committee in its original proposal, namely, that faculty contact and acquaintance should be improved, has indeed taken place. There is no question that faculty members from different departments, forced by circumstance to teach together in lecture and laboratory during the integrated exercises, come to know each other well and to understand one another's techniques and problems to a far greater degree than was true in the past. One specific result of this improved faculty contact can be cited: A number of individuals from different departments have undertaken collaborative research projects in which they have pooled their individual skills and different techniques to attack a problem of common interest.

The integrated programs can be considered to have had two other impacts on the Faculty. First, knowledge of the content of courses in other departments has improved, leading to better continuity in the teaching and lessening the need for repetition. The second relates to the development of instructors with the necessary breadth of experience to feel at home when teaching in the integrated pattern. The first year these programs were undertaken, finding such individuals, even in the large family of the Harvard Faculty, was not an easy task. Now, the necessary background to teach effectively by this method has been developed through experience of the individuals who form the nucleus of these teaching teams.

Another matter deserves comment. It was the hope of the original planners of this program that it would prove sufficiently flexible for change to be instituted as it seemed necessary. In other words, it would form the framework for progressive change when required by developments in medical knowledge or changes in available personnel. In general the program has proved flexible.

Since the original trial year, a number of changes have been instituted in both the first and the second years, and more are contemplated for the future. Whether the possibility of making these changes was really the result of the design of the plan, or whether an atmosphere favorable to change and experiment created by the original rearrangement increased faculty enthusiasm and willingness to try new ideas, cannot be said. None the less, the fact remains that change has occurred and continues to occur. Changes have been made not only in schedules of lectures and arrangement of material within courses but even such major rearrangements as the order of the teaching areas in the second semesters have been made.

(continued on page 53)

Editorial

ECHOES SOUND AFAR — CURRICULUM, CURRICULA!

Change is growth. Continuing experimentation is the foundation of an awakened society. Those who look with uneasiness at our present satisfaction with the happy suburban life and its emphasis on securing the status quo, will find hope and encouragement in the awakening now going on in at least 90% of our medical schools.

In medicine, this educational ferment is simply a response to an obvious need — the requirement of the student to accumulate greater knowledge in the same or fewer number of years. The situation at present is such that this mass of knowledge taxes the ability of the student's mind to absorb it, to say nothing of the ability of our teachers to present it!

The Flexner Report in 1910 culminated a period of rising agitation for reform in American medicine and helped to end many of the flagrant abuses in medical training. The period of 1910 to 1924 saw a stabilization of curricula, a closing of proprietary schools, but at the same time a tightening of controls on the curricula by the states. In 1925, a Commission on Medical Education was set up by the Association of American Medical Colleges to study medical curricula. This Commission had much to do with stimulating experimentation in medical education. Particularly since the close of World War II, and the birth of the A.A.M.C.'s Teaching Institutes under Dean George P. Berry, the experiments have flowered.

The phenomenal growth of the medical sciences stands out as a principal driving force in the extraordinary advances that have occurred during the last fifty years of medicine. This growth has necessitated a major revision in teaching techniques. The medicine of 1900 was the art of healing, involving little science and achieving progress through descriptive medicine. One revered physician followed another in the description and clarification of disease through countless lectures at the bedside and in the lecture hall. The student learned largely by rote. In such a manner, one generation handed to another the empirical knowledge it had gained through experience. Today, in Switzerland, Austria, Germany and Italy, this philosophy still exists — an unhappy outcome of the isolating effect of the war years upon these nations. New thought from the rest of the world has had little effect upon the medical faculties in these countries. Neither research, nor for that matter, development of the student's mind in our sense, is encouraged. In countries in which closer contact with the medical world was maintained throughout the War, as in Sweden and England, modern trends in medical teaching exist. Today there is ferment, also, in West Germany, and France is very much in the throes of modernizing herself on the American medical pattern.

Some there are who believe that the "new science" began at Hopkins. Surely, Harvard's Charles W. Eliot also had a hand in its birth and development in America, although he did not lack for opposition within the Medical Faculty itself! The generation which followed Eliot had scientific medicine as its objective and slogan, specialization as its dominant pattern and the university medical center as its preferred instrument. This was the Golden Age of medicine in which the physician no longer could be content to excel at the bedside. He had perforce to be a scientist also and he gloried in it. The "new science" brought with it tremendous improvements in our knowledge of medicine and therefore our ability to care for the patient: but for some, the new scientific approach meant overspecialization and a major degree of isolation among preclinical subjects. There were those who felt also that the modern medical school in its rush to develop and learn from the new sciences had not brought this new knowledge close enough to the bedside. Many looked with a critical eye at the increasing specialization in teaching: the forest, they felt, had been lost sight of, for the trees.

As a form of revolt, "comprehensive medicine" since the War has become the slogan and "integration" the modus operandi. What does this mean? True comprehensive-integrated medical teaching would train students by mobilizing various departments of knowledge for a unified approach to the human body in health and disease. In this manner, the student may learn in one block of sequential time the

normal function of the kidney tubule, its anatomy, physiology, pharmacology and pathology in health and disease. Such a training plan includes correlative teaching by representatives from each involved basic science and clinical department. The result is a happy amalgamation of departments in a medical school for a freer exchange of ideas and more coordinated teaching. Today there is also *less importance* placed on *didactic teaching* by the faculty and *more emphasis* placed on *learning by the student.* With this in mind, the student is given more freedom and responsibility for his own education, without forfeiting the guidance of the instructor. Scientific medicine then becomes comprehensive medicine, yet not thereby any less scientific. Because pure scientific medicine fails to deal properly with the patient's life and social environment, however, many of the present new plans include home care programs and stronger teaching of behavioral sciences. This brings to the student a better understanding of the patient, earlier in his training. Comprehensive medical teaching then becomes a blending of knowledge of disease and patient care into one continuum.

How have various schools approached the problem?

Stanford's solution represents an addition to the diversity of American medical education, providing specific opportunities for students who wish to continue a broad educational development during their medical studies. In essence it involves a five-year plan of academic work into which students enter after either three or four college years. *Expansion rather than contraction of time spent in medical school* in this plan is in sharp contrast, however, to the practice in other programs recently announced. But a happy bringing together of pre-medical and medical education results. There is each year an integration of certain basic sciences with clinical medical courses. There is also a large block of free or elective time each year in which a student may take advantage of the philosophy of self-education.

At Hopkins, under the stimulus of W. Barry Wood and John C. Whitehorn, properly qualified college sophomores or juniors are eligible for the first year in medicine in which the natural sciences and liberal arts are studied concomitantly. Year II deals with the structure and function of the normal body. Year III concerns itself with the disease in various parts of the body. Year IV involves instruction in clinical health and disease. Year V is devoted to clinical clerkship and free time for study and research.

Western Reserve's new program, under Joseph T. Wearn and T. Hale Ham, also placed emphasis on basic concepts, mechanisms of disease and *continuing self-education. Clinical concepts are brought into pre-clinical years and a home care program is included.* Their integration-continuity teaching concept is structured within a four-year program, divided into three phases. The first year is for the study of normal structure, growth and development. The second phase of one and one-half years considers alteration of normal structure and disease, and the third phase of one and one-half years pertains to the clinical application of the knowledge learned.

At Northwestern University Medical School a student *is introduced at the college level to courses that have a more direct bearing on medicine itself.* At the same time the humanities are continued into the medical curriculum, and an attempt is made, as at Hopkins and Boston University, to reduce the over-all time spent in medical education. A pilot group will start out after high school and their program will last approximately six years. Pathology and anatomy will be taught synchronously and comprehensive medical care will be a major part of the program.

The new trends at Boston University and at Harvard are well described in the accompanying articles.

There is much of good in these experiments. Built into most of them are three basic new concepts of education:

First, A shortening of over-all training whether it be at college, in medical school or in the early years of post-graduate training, with a realistic awareness that shortening for shortening's sake may well be dangerous. Second, an integration of the basic sciences amongst themselves in the teaching of normal and abormal bodily function and an earlier and more complete integration of basic science and clinical medicine; and finally, Comprehensive Medicine is encouraged. To many, this in its broadest sense means the bringing of new ideas (from basic science and behavioral sciences) to the bedside in a logical continuum of medical education for the student.

J. R. B.

The First Voyage of the S.S. HOPE

Jack E. Tetirick, '51

In September 1960 the *S. S. Hope* sailed from her home port of San Francisco, having been duly christened by Vice-president Nixon and accompanied by fire boats and jet fighters as a proper salute to a fine lady embarking on a mission of mercy and good will. The sailing culminated many months of planning by the parent committee: "The People to People Health Foundation, Inc."

The *S. S. Hope* was formerly the naval hospital ship, *U.S.S. Consolation*. She was loaned to the Foundation by the U. S. Government. Aside from this loan and the American Government's cooperation in Indonesia, the mission of the ship is a completely private endeavor. It is financed by industry, labor, private donations and the contribution of time by physicians. There are only 12 to 15 physicians aboard, approximately half of whom serve for a nominal salary during the entire year of voyage. The remainder are specialists in surgery and internal medicine on short-term rotation and are transported to and from the ship to serve about four months each.

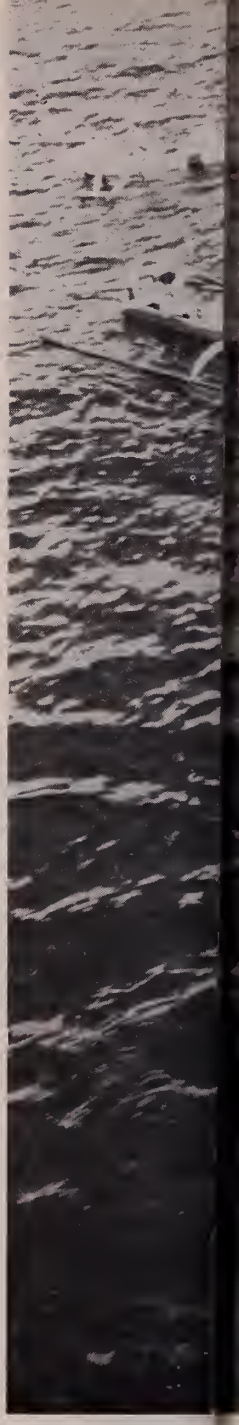
A fifth and very important category of support comes from the people of the country being visited. The host country supplies shore transportation, local hospital facilities, administrative personnel and, where possible, physicians who travel with the ship giving their time in the same manner as the American physicians.

The primary mission of the ship was teaching, and for this purpose, much of the hospital core of the ship had been converted into teaching space. Classrooms were constructed, equipped with film projection units and television receivers. A complete medical library was installed. Laboratory space was enlarged and additional diagnostic x-ray facilities, including a mass survey unit, were installed.

The ship was equipped with a film library from the American Cancer Society and the American College of Surgeons and the hold carried a large cargo of medical textbooks and periodicals collected by the Los Angeles Medical Society for distribution in Indonesia.

The flow of patients through the ship was designed to simulate a modern American hospital starting with an admitting ward and flowing through the usual channels, including such specialized areas as a small premature incubator unit and a typical intensive-care unit. At the end of his stay, the patient was returned to the referring hospital with a complete record. All x-ray films went with the patient from the ship and medicines were prescribed to complete the patient's course of treatment.

It was intended that teaching should be on all levels and for variable lengths of time. Each of the medical personnel aboard whether dietician, physiotherapist, operating-room nurse, or physician, had in addition to responsibility for patient care, a group of Indonesians who were observing and learning as they worked.



Right: Balinese teachers boarding the Hope *for survey chest films. In the background are native traders in Balinese outrigger canoes.*

PRIOR to the arrival of the ship, a local Indonesian committee of physicians had been appointed and assigned to the selection of cases. Some of these patients came from the physicians' private practice but most came from the large government hospitals. (The Indonesian word for hospital is *rumah sakit,* meaning: "house of pain.") Quite naturally, the cases were difficult and advanced. When the ship arrived, each physician was assigned to a group of Indonesian physicians and permitted to go ashore with his group to reselect the cases. Whenever possible, the cases were seen in consultation in the local hospitals. If a case had exceptional teaching value or there was an operable lesion present, the patient was brought aboard the ship for further study and treatment.

Below: Hope *personnel going ashore for a first conference with the local committee on Bali. The working group of the* Hope *staff was composed of both Indonesians and Americans.*

The Indonesian doctors came aboard for varying lengths of time. Many came only to watch a few sessions of live surgery on television. Seminars were conducted on basic preoperative and postoperative techniques; and a select smaller group came aboard to work closely with the American physicians over the four-week stay of the ship. In addition, three or four young Indonesian physicians served as Residents during the whole period.

On the nursing service, thirty Indonesian nurses were brought aboard for a month's stay, and a much larger group came aboard for specific classroom sessions or seminars. If one visualizes this active teaching and patient-care program and then adds to it the thousand or so ever present spectators trooping through the ship, peeking through portholes, surreptitiously opening the door to the surgical suite, or just standing around completely lost in the bowels of a seven-decked honeycomb of steel there emerges a fairly accurate picture of an aver-

age day in port when the ship was working at peak load!

The surgical cases were mostly advanced forms of diseases commonly seen in this country. The most common operative procedure in Indonesia is cystotomy for removal of a vesical calculus. Thyroid disease, both benign and malignant, is extremely common. The usual forms of malignant disease were seen, and we saw a number of interesting vascular problems, mainly because the Indonesian physicians were interested in discussing this field of surgery with us.

The first group of *Hope* surgeons in the first two months in Indonesia counted among its accomplishments the repair of three long standing arterio-venous fistulas of the lower extremities: the placing of the first successful vascular prostheses in that country; and the performance (to the best of our knowledge) of the first successful peripheral embolectomy in eastern Java.

Our gynecologist, Dr. Phillip Myers of San Mateo, California was inundated with cases which included many vesicovaginal fistulas, an abundance of abnormal obstetrics, and flocking to him from all over the island, came married Indonesian women who had not produced a child in the first years of their marriage, hoping that he could solve their infertility problem and thereby preserve their Moslem marriage! I also had the extreme pleasure of seeing an internist surrounded by so many heart murmurs that he looked confused and unhappy — just the way I feel about any *one* heart murmur!

THERE is little question about acceptance of the project in Indonesia. The physicians in the larger cities welcomed it as we would welcome our first medical convention in fifteen years. They came aboard early in the morning and stayed until the last movie reel was finished late in the evening. Those physicians and other medical personnel who were brought aboard the ship to live were completely integrated into our activities, sharing our rooms and food (with a fortitude that I did not appreciate until I went ashore on Bali for a week and lived on spiced cabbage, fried rice, and sugary tea).

Similarly, the effect on the population at large was dramatic. The ship's massive white hull and superstructure towering above the harbor was an object of fascination. There was always a large crowd at the customs gate struggling to get aboard for a visit. All of those who could possibly be accommodated were welcomed and escorted through the ship by Indonesian members of the *Hope* medical group. These visitors, particularly the children, would stand excitedly in front of the television, laugh and poke each other where an air conditioning duct blew cold air into the rooms, stop along each corridor for a small sip of cold water from the automatic fountains, and attack with vigor a small player piano in the recreation room that slowly wilted under

Dr. Tetirick practices general surgery with Walter Haynes, '51, in Columbus, Ohio, and is instructor in surgery at Ohio State University. John Ratcliffe, '45, was on the Hope *with Dr. Tetirick. The present H.M.S. surgical contingent aboard the* Hope *includes Richard Ireton, '50, and Walter Haynes, '51.*

A Balinese boy, admitted for evaluation of congenital absence of the sternum, is introduced to an old American custom, the nosewipe.

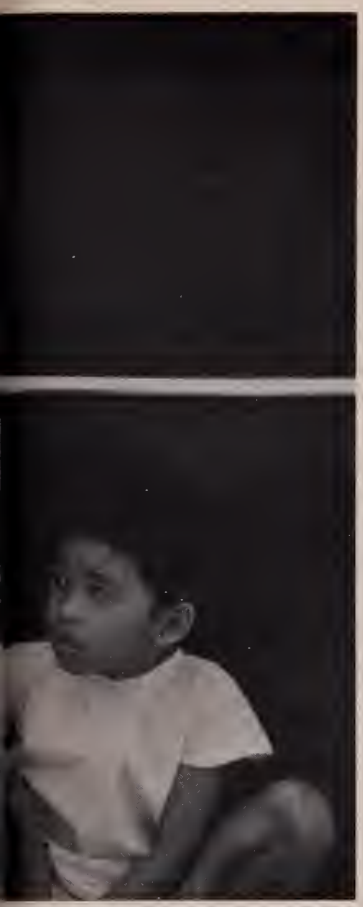
the massive pounding of hundreds of small brown hands and feet.

The Russian Ambassador visited the ship in Djakarta at the height of its activity. He went from a classroom jammed with physicians watching a mandibulectomy on television to a machine which made milk from sea water (and powdered milk) and terminated his tour by watching the happy sightseers in the recreation room. He departed with a firm and dignified step but with a facies that suggested gangrenous appendicitis. He was spared first-hand knowledge of the close friendships that developed between the Indonesian physicians and the Americans.

At the end of the day we sat at supper with these physicians, sharing our experiences and ideas and later in the wardrooms and private staterooms the discussions would be continued, developing the camaraderie that is familiar to all of us in medical school and residency training and quickly recognized by these men as one of the finest and most memorable of all human relationships.

THE ship's purpose was also to help Americans know and understand the Indonesian people. It was soon apparent in the area of social graces that the Indonesians were the teachers and we were the students. They used the advantages of their older culture skillfully and taught us that hospitality, in order to be perfect, requires a lifetime of devotion. Receptions were often held in the warm beautiful evenings with soft American music in the background interspersed with the delightful Javanese or Balinese dancing with its extreme grace and self-control.

The children of the family are skillful entertainers



Top right: Miss Ruth Currie, a staff nurse at the Massachusetts General Hospital, is shown making rounds in the intensive care unit on the S.S. Hope. *Accompanying her are two Indonesian nurses familiarizing themselves with American nursing techniques.*

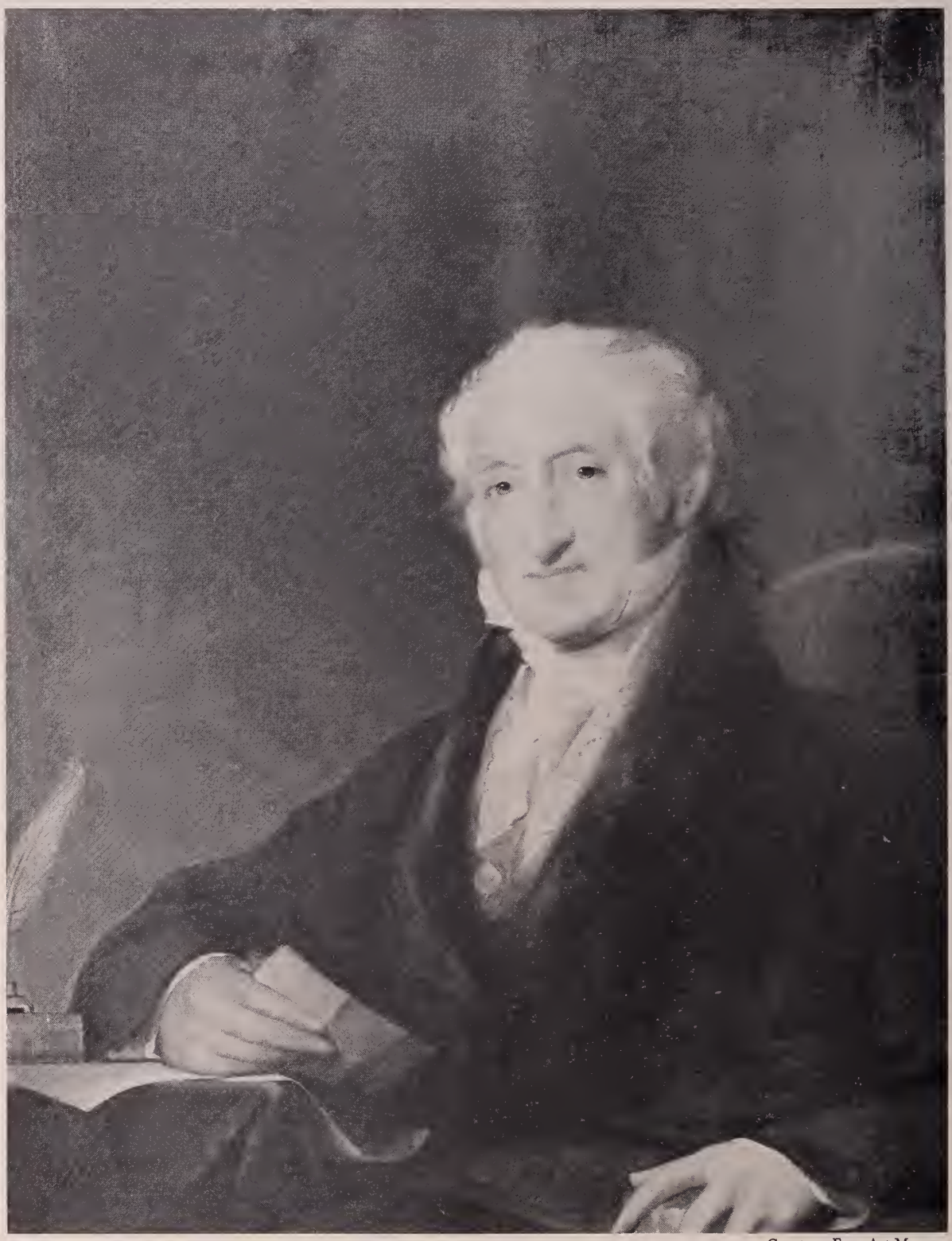
there is no greater social honor than to personally entertain guests. Thus it was that President Sukarno's son conducted the band that entertained us at the Governor's reception in Djakarta, and the daughter of one of the finest families in Bali, a beautiful thirteen-year-old Eurasian girl, danced for the *Hope* people at the personal invitation of the President at his summer palace.

It interested us that entertainment and the enjoyment of life was not something to be treated as an afterthought by the Indonesian people but considered fully as important as their vocation. They often expressed the importance of enjoying life and surrounding themselves with beauty. Thus, in their country with its alarming shortages of money and material goods, there were always beautiful flowers, graceful and charming women, fragile and shimmering music, and the warm hum of conversation between friends. That such people would quickly recognize an act of friendship by the American people there is no doubt; that they are worth such an effort there is no argument; that the big white ship is there is a matter of pride to every American.

THE ship is scheduled to leave Indonesia during the month of May. It will cruise to Singapore to be resupplied and then stop at Saigon in Vietnam for the remaining four months. Invitations have been extended from Pakistan, Korea, and Taiwan. It is hoped that the committee will be able to support such future visits. If adequate support is forthcoming both from the people and from physicians, there will be more ships, specifically for South America and Africa.

Anyone for Karachi? Perhaps you'll be there across a white tablecloth at supper after a hard day in surgery!

Diagnosis Deferred: Boylston Birthday



Courtesy, Fogg Art Museum

NICHOLAS WARD BOYLSTON, NÉE HALLOWELL

Enough, perhaps too much, has been said and written in these stirring times about institutions and organizations observing their sesquicentennial anniversaries. The Yale Medical School and the Massachusetts General Hospital, as noted not long ago in these very pages, celebrated within the past few months their century and a half of continuous and almost unquestioned viability, and no doubt other establishments are finding the early 1960's a convenient period for the enjoyment of similarly innocent merriment.

The obtrusive fact is that any agency that had its beginnings in or about the year 1811 is in a peculiarly privileged position for the celebration this year of its own sesquicentennial bacchanal. Among these the Boylston Medical Society of Harvard University stands unique, having been founded on January 6, 1811, and having been referred to in this department of the *Bulletin* in May, 1958, as the oldest example still extant of "Club Life at Harvard Medical School."

The name "Boylston" has left an indelible impression on Harvard University and the transriparian town of Boston. Dr. Zabdiel Boylston, great-uncle of Ward Hallowell, was the famous advocate of smallpox inoculation, and Nicholas Boylston, uncle of Ward and originator of the Boylston Professorship of Rhetoric and Oratory, persuaded Ward to take the name of Boylston and thus started the series of events that made possible this installment of "Diagnosis Deferred." For Ward Nicholas Boylston went into trade, at which he was singularly successful, gave to Harvard College the fund that resulted in Boylston Hall, and established by bequest, in 1803, the Boylston Medical Prizes. When the first student medical society in the country was formed at Harvard in 1811 it not unnaturally took his name; a name that is also attached to a place or alley in Boston and a street in that municipality as well as one in the adjacent village of Muddy River, or Brookline. But perhaps this is a digression.

Despite the existence of various histories of the Boylston Medical Society, its actual beginnings are apparently unrecorded in any existing archives. Of these accounts the most complete is that of Mark Altschule, published in 1951, and the most recent that prepared this year by Newton Hyslop of the Class of 1961. The 1923 "Catalogue of the Boylston Medical Society" contains, in addition to the Constitution and Bylaws and a list of the members and officers, a brief history by no less an authority than S. K. The author may be variously identified as S. Keep, of the vintage of 1832, S. Kneeland of 1843 or S. H. Keep of 1852. Or, he may have been Shepard Krech, who became a member in 1921.

Although the exciting details and even the place of the first meeting of the Society have been lost to posterity the treasurer's accounts stand firm and convincing. Paper, an inkstand, quills, a sandbox and sand were purchased in the very first year and $1.75 was expended for a trunk in which to keep the records; both trunk and records have disappeared. In the same year $2.00 was invested in candles, candlesticks and snuffers, the then current observance of gentlemanly manners prohibiting the blowing out of the flame, a discipline that was continued after gas came in. In 1816, so rapidly had science advanced, it was necessary to spend $3.45 for lamps and $.87 for an oil pot — like the festal virgins, well oiled.

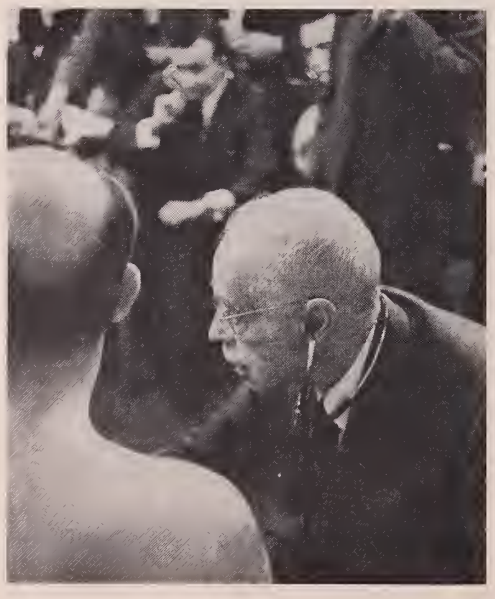
Fortunately, the Act of Incorporation, the Constitution and the lists of officers and members of the Boylston Society survived the loss of its other early records. Consequently the authority prescribing membership in the Massachusetts Medical Society and residence either in Boston or within five miles of that metropolis for the President must be unquestioned. The trustees shall be *practicing* members of the state society — a qualification not attached to the presidency — and they must reside within the Commonwealth.

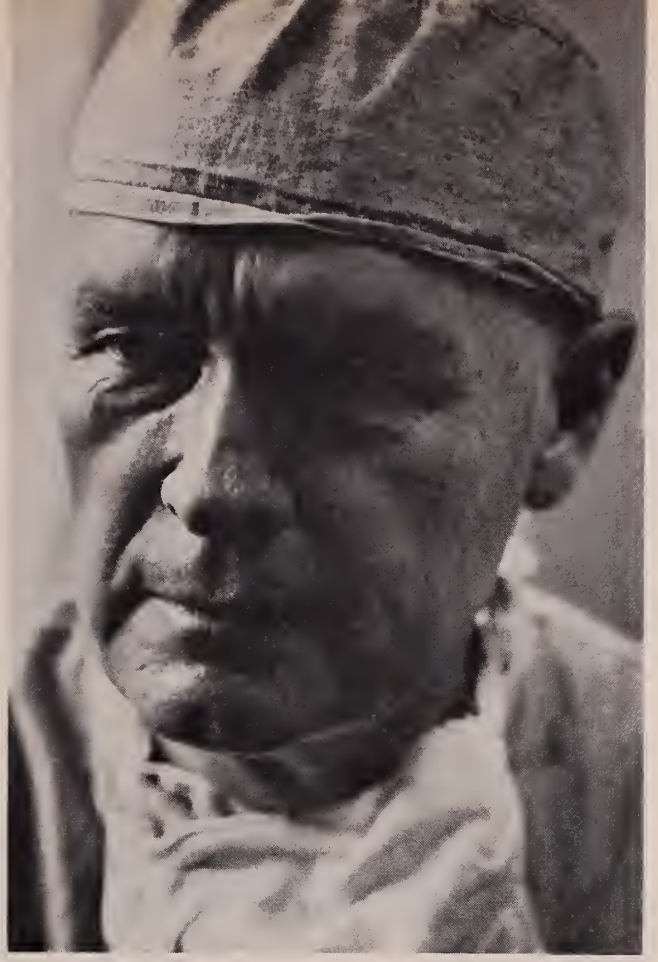
The names of the first two presidents are as immutably coupled in the annals of medical history as are those, in other corridors of fame, of Castor and Pollux, the incandescent gemini of the Zodiac; of Damon and Pythias, two noble Pythagoreans of Syracuse (Sicily), or of Huntley and Brinkley, of wider, if more recent acclaim.

John Collins Warren, born in 1778, was the first to assume the presidency; his friend James Jackson, a year older, succeeded him. The same two were founders, in the same year that the Boylston sprang into life, of the Massachusetts General Hospital, and in the next year of the *New England Journal of Medicine and Surgery.* Had they been a little older at the time they would undoubtedly have established the Massachusetts Medical Society in 1781 and the Harvard Medical School in 1782. As it was, they were successively presidents of the Society, Jackson from 1825 to 1832 and Warren from 1832 to 1836 and they were, respectively, Hersey Professor of the Theory and Practice of Physic, and professor of anatomy and surgery at the Medical School, Jackson having succeeded Benjamin Waterhouse in 1812 and Warren following his father, John, in 1815.

The founding of Boylston coincided with the moving of the School from Cambridge to Boston, leaving a low-vaulted past in obedience to a "manifest destiny" that was perhaps also a factor in the establishment of the Society. The School's next step in following that destiny came with the election of Charles W. Eliot as president of the University in 1869.

The Society's Centennial dinner in 1911 was held in the Harvard Union — "the first time that any Society has been granted the use of the room." The speakers included the only honorary member — fittingly enough, President Emeritus Eliot. This year, in the presidency of Dr. Rutstein, the Boylston Medical Society celebrates a birthday on which it is only fifty years younger than Harvard College was on the occasion when her sons, thronging to the jubilee of 1836, for the first time heard Fair Harvard sung. And if this be history, make the most of it.





The Once and Future General

MANY years, at least by Boston standards, have passed since the Charles River lapped at the foot of the Bulfinch Building of the Massachusetts General Hospital. Were the Hospital's founders, Drs. James Jackson and John C. Warren, to stand at the top of Joy Street today, they would see that the Charles has receded and a complex of buildings and rushing traffic has taken its place. The rows of Victorian houses around the Hospital have come, grown old, and gone. The city's Italian and Polish populations have moved in, and out; acres of bald land presage the advent of still another era.

Finding the Bulfinch Building a bit more ivy-covered than they knew it might not surprise these two; it might not astonish them to find their own profiles stamped on the medal of the General's One Hundred and Fiftieth Anniversary Convocation; there's nothing very new about medals or ivy.

A glimpse of modern medicine at the M.G.H. might dizzy them a good deal more. What would be their reaction on being allowed to watch a telemetered patient lifted into position on his operating table for irradiation by neutron beams from M.I.T.'s nuclear reactor; how would they view various forms of radiation, electrodes and ultrasounds that are aimed at the seat of man's understanding? The growth of the General's affiliation with Massachusetts Institute of Technology, and the bewildering size and extension of the Hospital's services might make the two founders Warren and Jackson rather wonder at the homage paid to themselves; for there is nothing more exhilarating than seeing the twentieth century through the fresh eyes of a traveler from the nineteenth, who, inverting the words of the medieval scholar, might exclaim at first glance, "These are giants, sitting on the shoulders of dwarfs!" What then would a second look bring?

AS the weeklies go, the Massachusetts General Hospital's One Hundred and Fiftieth Birthday Convocation was a mighty event and one which now lies in the dim past. To the plod-

ding quarterly remain the few words of hindsight. The coverage was copious, both national and international; for the Convocation was not only a tribute to the past but a hope for the future; specifically, it marked the formal opening of the M.G.H. twenty-million-dollar drive.

Although scientific symposia dominated the first two days at the Convocation, the J.F., or perhaps the J.P., Kennedy family, diverted the limelight on the opening day. The President's in-absentia tribute on television opened the show; later, several other Kennedys gave an unexpected press conference in their role as members of "The first visiting committee" ever to visit the M.G.H. The Committee would oversee the Joseph P. Kennedy, Jr., Memorial Laboratories for Mental Retardation at the Hospital. Eunice Kennedy Shriver explained her father's insistence that his children take an active part in the Kennedy philanthropies; and she added with Kennedy candor: "Teddy's just been made President — oh! Not *that* President! President of the Kennedy Foundation. You might say it was rammed through."

A klieg-light battery of heart experts appeared that morning, including Drs. Ancel Keys and Paul Dudley White. In a field that has its partisan groups, Dr. Howard Sprague put the problem in focus when he suggested that if we try to avoid heart disease, we might include among the baby's christening presents "a do-it-yourself serum cholesterol kit; a life membership in Alcoholics Anonymous; and a negative Diners Club Card." It was Dr. Sprague's belief that many people are protected by both heredity and environment and may indulge in any of the more appealing vices without cardiovascular retribution.

On through the afternoon, in some cases an overlong afternoon, audiences heard various symposia, in various small auditoria, comment on various areas of medical interest. In the Mosely Rotunda, John F. Enders of virus-culture fame commented on the renaissance in cancer research and noted that virologists, "even ordinary ones like us, are keenly interested and anxious to get into this game. As far as we know at present," he said, "there is no distinct difference between tumor viruses and ordinary viruses."

ON the second and third Convocation days, the focus shifted from the scientific to the socio-economic, and from the M.G.H. to the Sheraton Plaza Hotel in Copley Square. Here, audiences heard, and television cameras watched, a panel redeem a tried and tired subject: "The Financing of Medical Care." Dr. T. G. Fox, the foxy editor of Britain's *Lancet,* explained his own role on the panel "to be the external factor, even the threat, that draws you all together. Some of you may see in me one of those foxes who have lost their tails and now recommend others to cut off theirs, so as to be in the fashion." Dr. Fox, however, was the speaker least apparently pushing a product.

From the literal extreme right, Edwin J. Faulkner, President of the Woodmen Accident and Life Company of Lincoln, Nebraska, spoke for "the superiority of individual budgeting, because it is the more wholesome method." Dr. Fox, however, noted that many physicians believe that social medicine is a phenomenon of the first half of the twentieth century, and are waiting for countries to become very prosperous, so that health insurance can be done away with. "This," he said, "is the day for which Mr. Faulkner is unquestionably waiting."

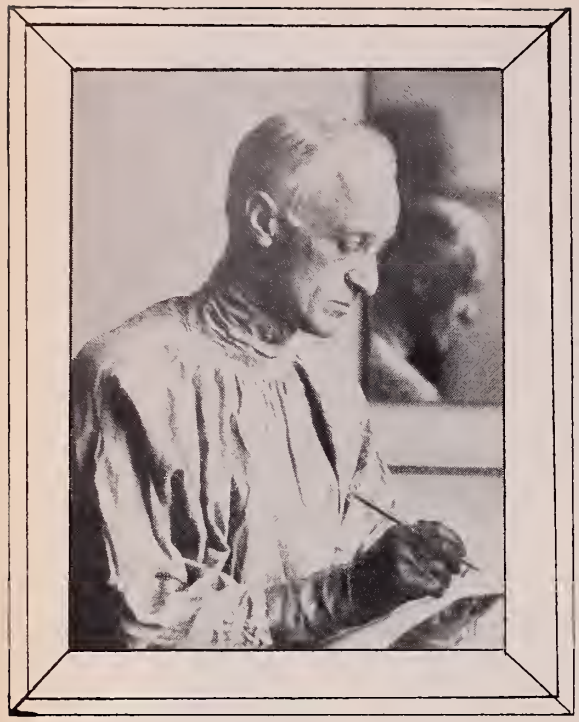
Former Secretary of Health, Education and Welfare Arthur Flemming, acting as moderator, made it clear that he still favored the Javits' approach to the problem of care for the aged in this country; but he did indicate that unless the medical profession and others were willing to get back of an approach of this kind, they would undoubtedly contribute to the passage of a bill that would tie the insurance program in with the Social Security system.

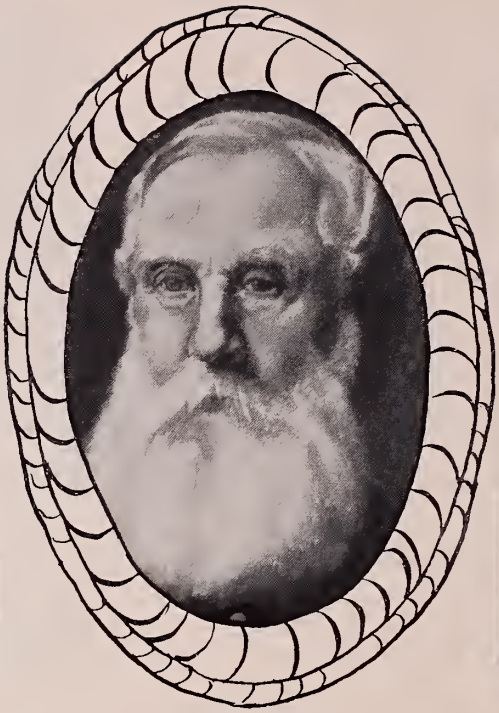
Dr. Fox was free to admit the defects in the present British Health Services, so free in fact that the listener was prone to forget them. "To each according to his needs," he said, "has come to seem so natural in Britain that we are shocked when we see anyone relating medical care to ability to pay." In summing up his part of the afternoon session, Dr. Fox admitted that he had no solution for the problems of American medicine. "But if I do come up with any ideas," he said, "I will put them on the back of a postcard and send them."

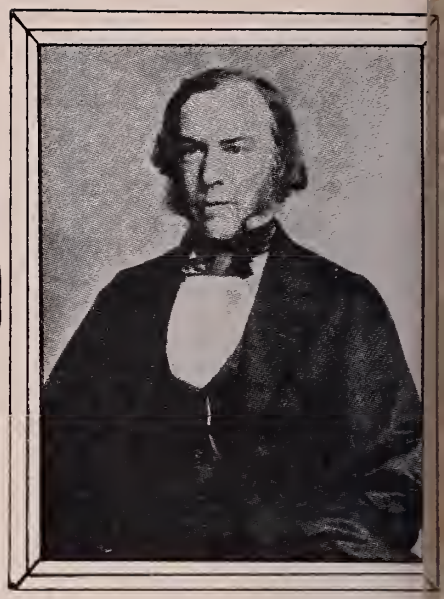
ON the Convocation's final day, international medicine and the future of medicine furnished appropriately grand panel discussions. Sandwiched in, so to speak, between the panels, was Luncheon Speaker Dr. Howard A. Rusk, Professor and Chairman of the Department of Physical Rehabilitation and Medicine at New York University. Describing his rehabilitation program as an outgrowth of a program for World War II para- and quadriplegics, he said: "I truly believe we are wasting the truest resource we have and that is wisdom. People can be born brilliant but wisdom only comes with age. The problem in rehabilitating the aged," he concluded, "is not money, but doctors; we need ten times as many doctors in the program. If these patients can take their place back in the world, they have a depth of spirit you and I know nothing about."

How would the Drs. Warren and Jackson have reacted to hear the international panelists almost to a man appeal for America's help for their own medical services? What would they have thought in the afternoon to hear René Dubos predict that our analytical approach to science might give way to a new discipline in which body-mind relationships would be studied "at higher levels of organization"? What these higher levels might be, or whether the idea of treating the whole man was really so new — we leave the consideration of these questions to those who plan convocations; and they might be wrong, anyway. For even the reflective men of the sixteenth century were wrong when they imagined themselves returning to the glory of classical Greece and Rome, and accordingly named their age the "Renaissance."

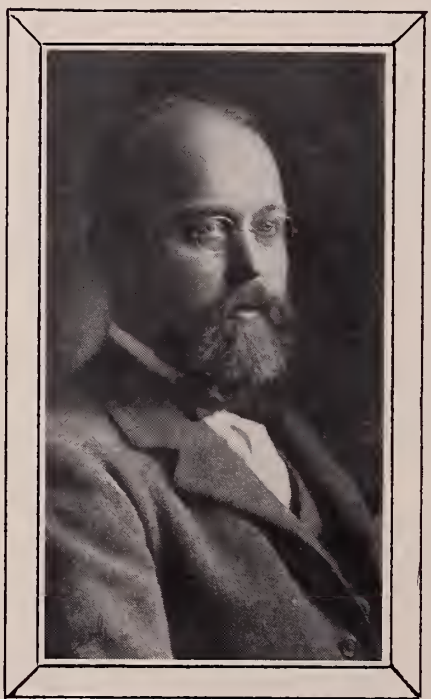
Photographs
taken for the M.G.H. Convocation
by Ted Polumbaum





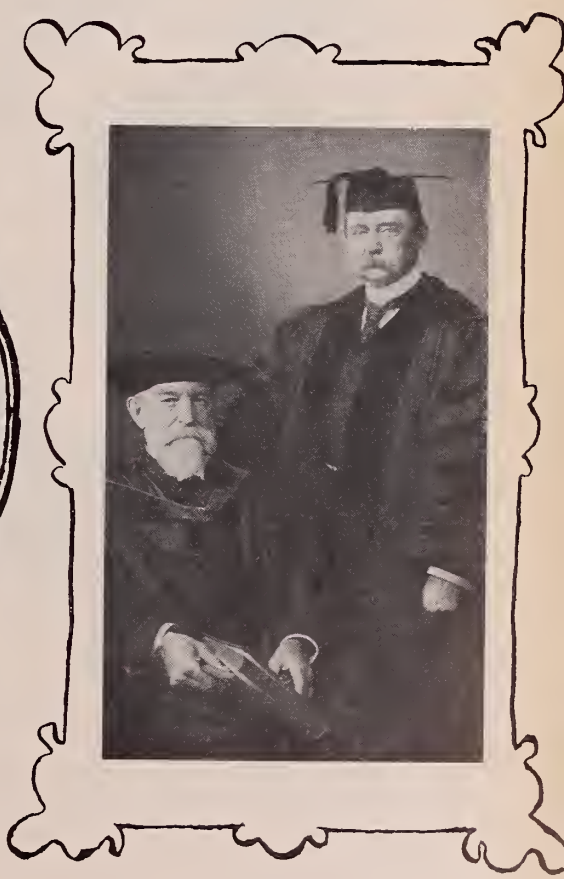


How is your



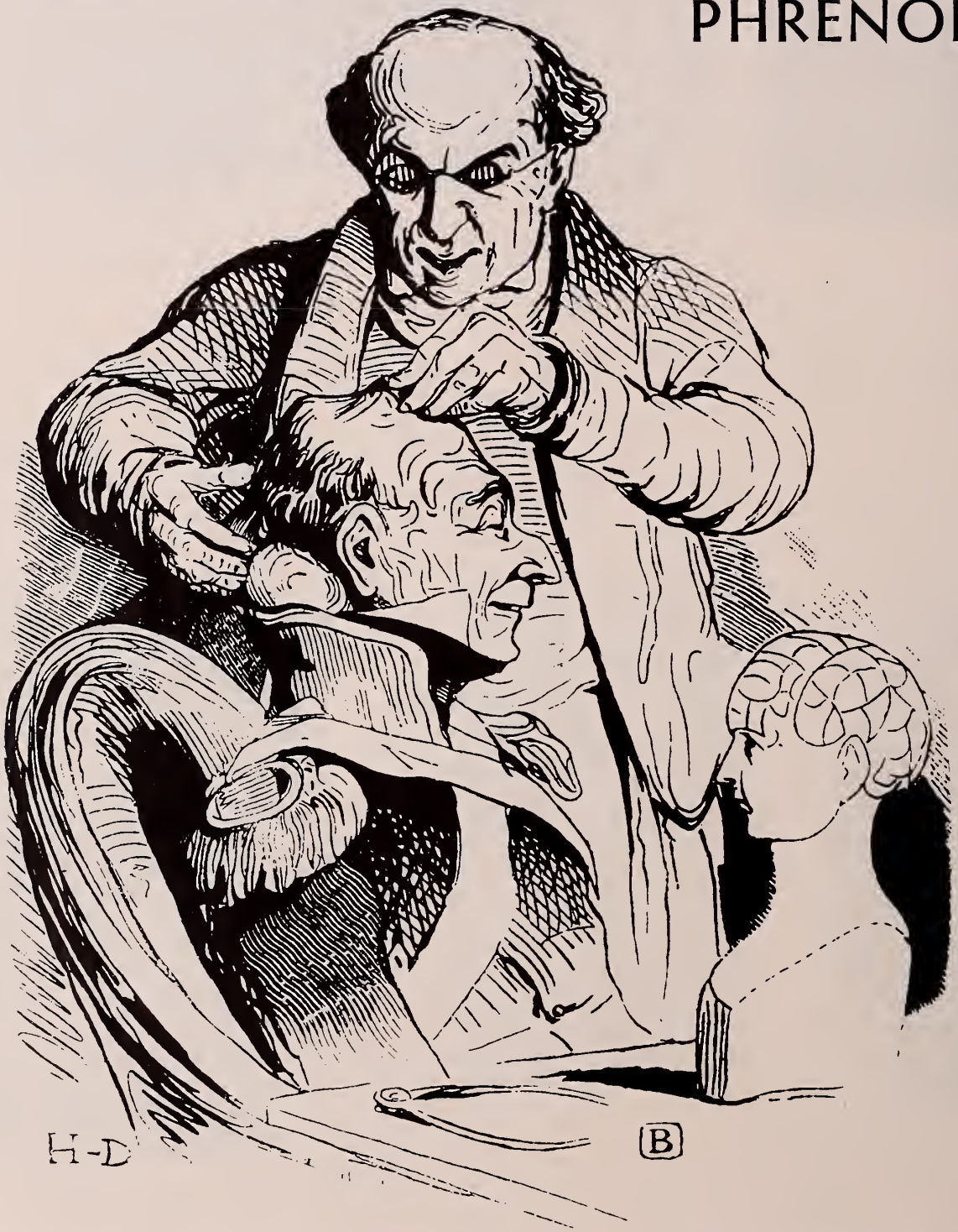
H. M. S. History?

(Check your score on page 12)



The Phrenologist: cartoon by Daumier, 1839.
Illustrations from the Bettman Archive.

PHRENOLOGY:



A NINETEENTH CENTURY SCIENCE

Harvard Welcomed Phrenology's Prophet with Enthusiasm.

Frank O. Avantaggio, Jr., '61

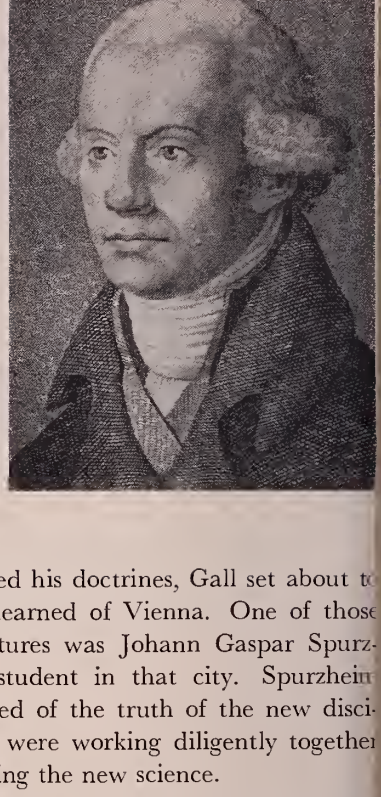
Phrenological chart, indicating the locus of talents.

THE elements of phrenology were largely proposed by two German physicians early in the nineteenth century. They were Franz Joseph Gall and Johann Gaspar Spurzheim, the former the master and the latter the disciple. Spurzheim carried the banner of phrenology forward long after he and Gall had gone their separate ways. But it is Gall to whom we shall first turn.

He was born in Baden in 1758, and studied at Strasbourg and Vienna, where he took his medical degree in 1785. He is reputed to have been a fashionable, successful and extremely competent physician. Had he stayed with this purely practical pursuit, he would undoubtedly have lived out his life amid the gaiety and elegance of Vienna; but his curiosity ruled otherwise.

Gall as a schoolboy was particularly plagued by his inability to remember the numerous facts that were placed at his disposal. He soon discovered that the most successful of his companions in memorizing were those with a great prominence in the region of the eyes. Indeed, the most successful of all was a lad known as "ox-eyes." He then observed that in other companions who excelled in a particular activity, one could often find areas of prominence on the skull. One chap, for example, was extremely adept at leading young Gall back from the woods when the latter had lost his way while looking for birds' nests. This lad, then, must surely have a greatly developed faculty for direction or "recognizing places." Still another schoolmate was especially receptive to the religious instruction. Obviously, reasoned Gall, this boy possessed a huge quantity of benevolence and veneration. And so it went.

By the time Gall was established as a physician in Vienna his researches had crystallized his youthful observations into a new and rather radical hypothesis to describe the function of the brain and explain the different manifestations of the human personality. In brief, Gall proclaimed that the mind manifests itself through a number of varied functions and that each function is localized in a particular anatomical area of the brain. Such an area he termed an "organ."



The founder, Dr. Joseph Gall: possessed a very large cerebellum.

Until this time, Gall's term for this study was "craniology," although he freely admitted that this term was not fully adequate, for his object was to examine and explain the brain, and the cranium was merely a "faithful cast" of the brain. In naming the new discipline "phrenology," his design was not that it should become a science of bumps and protuberances; rather, he believed that it would aid in "attending the workings of our own minds, tracing the power which external objects have come over us, discovering the nature of our emotions, affections and propensities, comprehending the reason of our being affected in a particular manner — and pointing to the why and the wherefore of the differences of the mind, disposition and character."

GALL'S researches spread to encompass the lower animals. He conducted numerous observations and dissections in an attempt to explain the peculiar character of many of the more common species. These animal studies also enabled him to discover and delineate more of the basic faculties of the mind. His extensive researches led him, after a time, to postulate twenty-seven primary faculties or organs of the brain. These ranged from amativeness, or the organ of physical love, to the organ of theosophy, which was held responsible for the Idea of the Supreme Being. Each of these organs acted with independence of expression, yet, at the same time, one organ might influence the expression of another by potentiating or inhibiting its powers.

Note:

On page 31 of this issue the beginnings of the Boylston Society are described by the persistently anonymous author of "Diagnosis Deferred." This article has been adapted from a paper presented before the Boylston Society in October of last year. It is published in commemoration of the 150th Anniversary of the founding of the Society.

Having thus established his doctrines, Gall set about to announce them to the learned of Vienna. One of those present at his early lectures was Johann Gaspar Spurzheim, then a medical student in that city. Spurzheim quickly became convinced of the truth of the new discipline and soon the two were working diligently together in the cause of establishing the new science.

The dissections and lectures continued in Vienna, until in 1802, the Austrian government decided that Gall's tenets were essentially antireligious in nature. He was forbidden to speak further in public on the subject of phrenology. Gall elected to leave Austria and Spurzheim accompanied him. For the next five years the two wandered up and down the Continent. "Like two philosophers of an earlier age," according to Warren, they travelled from place to place, lecturing, demonstrating and reading skulls.

The pattern of these travels was a well-established one. The doctors would enter a town with their growing collection of skulls in tow and embark upon a series of lectures expounding their system. Invariably they included a visit to local schools, almshouses, or penal institutions where they astounded the officials by a correct character analysis of the individuals that were presented to them. The *Foreign Quarterly Review,* reprinted in 1833, records one of these visits:

> "On the twentieth of April the visit was made a Spandau, in the presence of the privy-counsellor, Hufeland, one of the most philosophical physicians of his age, and of several other official persons of similar respectability. Four-hundred and seventy heads were submitted to inspection. In every robber the organ of theft was highly developed, accompanied by various other organs in the different individuals. In one, Dr. Gall perceived the organ of mathematics strongly pronounced, together with others denoting skill in the mechanical arts. This man, Kunisch, had in fact committed several robberies in which his dexterity ha

The prophet, Dr. Johann Gaspar Spurzheim: captured Boston with his charm and brilliance.

much assisted him, and his address was such that he was entrusted with the care of the spinning machines in the house of correction."

Thus did phrenology spread throughout the length and breadth of continental Europe. In 1807, the two arrived in Paris, where they prepared to present their cases before the learned French anatomists. Gall and Spurzheim felt assured of success. Napoleon, however, apparently incensed at the idea of his French scholars being taught anatomy by two Germans, caused a somewhat less than favorable report of their discoveries to be issued, and the two apostles consequently received a cold reception from the assembled French scientists.

IT was Spurzheim, rather than Gall, who was destined to carry the doctrine of phrenology to the English-speaking world. In the course of his travels with Gall, he had begun more and more to assume the role of colleague to the founder. Soon after the two took up residence in Paris he began to publish on his own, altering to some extent the precepts of Gall. Spurzheim was honored to describe more faculties, bringing the total to 35, while at the same time he rearranged them to give some order to the many organs.

The organ of physical love of Gall, or what Spurzheim has called amativeness, was an important organ in the phrenological system. This organ is centered in the cerebellum and, "when much developed, forms two prominences one on each side above the hollow of the neck. The nape of the neck is then large and thick and the ears widely separated from each other." Naturally, one must beware of heavily-muscled necks or of great adiposity when evaluating the organ. There were observations made on a young widow under his care who suffered much from the state of continence in which she lived. He remarked that before each attack of nymphomania, to which she was subject, she always complained of a feeling of extreme tension in the region of the cerebellum, which caused her to throw her head backwards. Gall, who one day attempted to relieve this by sustaining her head with his hand, was struck with the size and the heat generated by this part. Also on record is the case of a soldier who, after receiving a sabre cut at the base of the neck, never again experienced any sexual desire. Or again, in Salpetrière a poor soul was found, "one of those women of ardent temperament whose only aberration consisted in the most imperious sexual desires." She was alleged to have had 10-12 men in the course of each day, each occasion characterized by intense swelling and pain in the nape of the neck. This was relieved by giving way to her rampant passion.

A visit to a workhouse in Germany is described which contained, "like other places of the kind, the aged, the insane, the idiots and the children of illicit love." Among the latter there were a boy and a girl who were selected by Gall and Spurzheim for the extraordinary differences in their cerebral organization. The former had the frontal and sincipital regions very finely developed, giving the stamp of nature's nobility to him, whilst the latter had an organization quite the reverse; the basilar and occipital regions presented a considerable predominence over the frontal and sincipital; the cerebellum was of uncommon size and Dr. Spurzheim suggested that great care should be taken of her. But on the following day when we went to take models of these two individuals the house surgeon informed us that the girl had already indicated a lewdness of manner, although she was only five years old.

Finally it must be added that Gall himself possessed a very large cerebellum, which, according to one biographer, seems to have been the only faculty which he abused.

IT is interesting to note the controversies that raged around phrenology as it struggled to gain respectability in the world of science. As already noted, the church took

President Josiah Quincy of Harvard: buried Spurzheim at Mt. Auburn Cemetery.

strong exception to the new doctrine. The elements of fatalism and materialism made the theory untenable for the clergy. The metaphysicians of the age objected to phrenology because it compartmentalized the mind and removed the sublime from human expression. The anatomists objected for a variety of reasons, some of them quite basic, others a good deal more picayune. The width of the frontal bone, for instance, and the error it would introduce in evaluating the size of the frontal organs, was a cause for endless debate.

But far and away the most vociferous of the anti-phrenologists, as they came to be known, was the group at Edinburgh. In 1815, a scathing indictment of the phrenologists was published in the *Edinburgh Review.* The reviewers looked upon the doctrines taught by these two peripatetics as "a piece of thorough quackery from beginning to end."

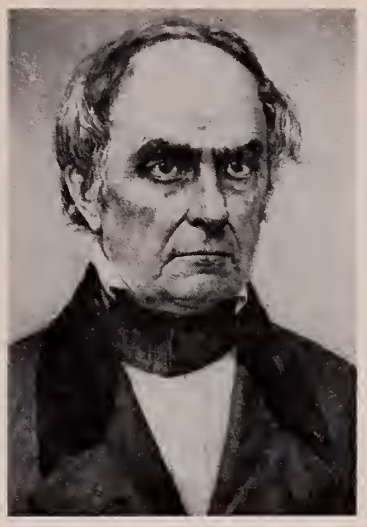
And so the criticism went. Dr. Roget, in the *Encyclopedia Britannica,* considered phrenology "a wild effusion of a bewildered imagination," while *Blackwood's Magazine* considered fool and phrenologist to be "terms as nearly synonymous as could be found in any language."

The truth of the matter, however, is that the *Edinburgh Reviewers* were not at all correct in their accusations; for Gall and Spurzheim were adding a great deal to the knowledge of anatomy. Spurzheim, for instance, had perfected a novel method of brain dissection which he used to confront his antagonists. Such he did in 1815 when he journeyed to Edinburgh to beard the lion in his own den, and answer the city's fierce criticism. There followed a much celebrated demonstration in which Spurzheim, "with the *Edinburgh Review* in one hand and a brain in the other . . . opposed fact to assertion." He was unable to convince the anatomists but seems to have otherwise carried the day for phrenology, for no less than 500 converts to the new doctrine were recorded. As for Spurzheim, he was sufficiently emboldened to declare that, though the Scotch were slow to learn, the fruit of his labors would ripen one day in Scotland and would spread phrenology throughout the whole of Britain.

IN the summer of 1832, Spurzheim finally made up his mind to visit the United States, having "received pressing invitations from various scientific bodies in Boston and other cities in the U.S. to cross the Atlantic for their instruction in the true philosophy of the mind." Prior to the Spurzheim visit, phrenology existed in a rather haphazard fashion in the New World. Phrenological societies did exist in Washington and Philadelphia, and one Charles Caldwell of Kentucky was unusually energetic in delivering lectures on the subject. Yet except for ridicule, Caldwell attracted little public attention. Spurzheim resolved that, while in America, he would "propagandize the doctrines of phrenology" as well as "study the genius of our natives." He expressed a particular interest in the American Indian. (Gall and Spurzheim had earlier proved that the European head, by their mensurations, approached the highest form of a well-balanced skull.) He found the Indian to be especially large in self-esteem, locality, and destructiveness.

With the exception of a brief stop in New Haven, where he was received by Professor Benjamin Sillman, and a trip to the state institution at Wethersfield, Spurzheim sped straightway to Boston to open his American campaign — and this he did with great vigor. Nahum Capen, a Boston publisher of high esteem, seems to have placed himself at Spurzheim's disposal. Capen has very carefully chronicled his stay in the 'Athens of America,' a term apparently dear to Bostonians before the 'Hub of the Universe' came into common usage. From Capen we learn that Spurzheim was well received by many of the first citizens of Boston. He quickly became acquainted with Daniel Webster, President Quincy of Harvard College, Nathaniel Bowditch, and other distinguished men of Massachusetts. It was remarkable, according to Capen, "to see with what accuracy he could delineate their peculiarities and character."

Spurzheim carried on a series of lectures in downtown



Daniel Webster: was called "The Lion of the North"

Boston at the Athenaeum and in Cambridge at Harvard College. He lectured and dissected tirelessly for members of the "Medical Faculty of Harvard and other professional gentlemen of Boston and vicinity" and embarked upon his usual skull-scanning tours of local institutions of education and correction.

Spurzheim's personality was apparently of magical nature, for learned minds of every discipline were completely swayed. Early in November of 1832, however, a few short months after his arrival, he was seized with a fever, and though he valiantly attempted to proceed with his lectures, he was soon forced to bed, never to arise again. Even the consultation of Dr. James Jackson, called in by Capen, was unable to halt the course of the fever. Spurzheim died, "without a groan or a struggle" on November 10, 1832, in Boston. Yet his mission to America was not without consequence, for he had captured all of Boston with his modest charm and his brilliance. A public funeral befitting such a dignified foreign scientist was arranged by a very venerable group, indeed, with the Honorable Josiah Quincy, President of Harvard University, presiding. A committee under the direction of Drs. John C. Warren, James Jackson, George C. Shattuck, Walter Channing, George Parkman and others equally distinguished was instructed to take a careful cast of the Spurzheim skull.

The Reverend John Pierpont composed an ode to be sung at the services by the Handel and Haydn Society. Professor Follen of Harvard University, delivered the funeral oration. Capen records the presence of over 3000 persons at the funeral services in Old South Church, and many more were turned away. "The decease of Spurzheim," wrote Capen, "cast a gloom over the city not to be described by language. We have never known a death which seemed to excite so universal and sincere a feeling of grief. The citizens of Boston have seen and heard him. They have met him and have been delighted with his conversation. They have been charmed by his manners and his love, and inspired by his language."

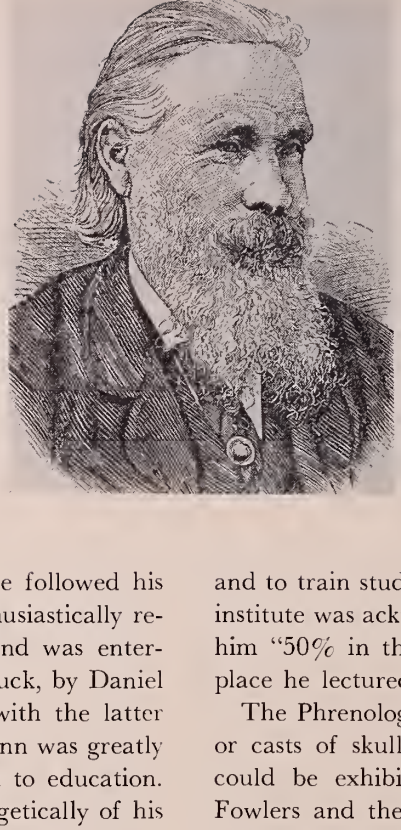
Spurzheim was buried in the Mt. Auburn cemetery; his cortège was accompanied by the members of the Boston Medical Society which had resolved to attend as a body "the funeral obsequies of the deceased."

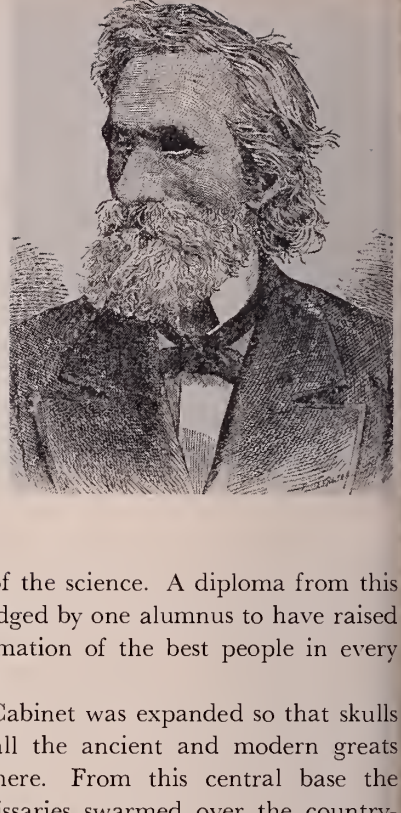
On the evening of the funeral, Boston enthusiasts met to inaugurate the Boston Phrenologic Society and elected Capen as secretary and John Pierpont as president. One of the first transactions of the Society was to send a communiqué to Europe and to the Edinburgh Phrenologic Society describing Spurzheim's reception in America, his death and regal interment. The Bostonians were requested by George Combe of Edinburgh to preserve Spurzheim's brain, heart and skull — a request which was fulfilled. The skull came into the possession of the Boston Society and subsequently the Warren Museum of the Harvard Medical School.

THE Boston Phrenologic Society remained an active group for about ten years. The birthday of Spurzheim was celebrated annually with a suitable oration, dealing with some phase of this great man's life and work. The proceedings of the Society's meeting were published in the *Annals of Phrenology,* a Boston publication which bloomed and died within the same span of ten years as the Society existed.

We must mention briefly the last phrenologist who made any attempt to maintain this subject as a dignified science. This was George Combe of Edinburgh. A lawyer by training, Combe became converted to phrenology at an early age, despite the fact that as a student he joined in the general burst of ridicule on Spurzheim's first visit to Great Britain. Combe and his brother, Andrew, who was a physician, became most active in phrenology. They seemed destined to fulfill Spurzheim's earlier prophecy that "from this spot (Edinburgh) the doctrines of phrenology shall spread all over Britain."

With the death of Spurzheim, Combe assumed the lead-





The Fowler Brothers: Lorenzo N., Salesman extraordinary; and Orson S., Impresario and High Priest.

ership of the European school. In 1839 he followed his mentor's footsteps to America and was enthusiastically received. In Boston, we are told, he met and was entertained by Drs. Warren, Jackson and Shattuck, by Daniel Webster and by Horace Mann. Indeed, with the latter Combe formed a lasting friendship; for Mann was greatly impressed with the phrenologist's approach to education. Combe returned to Britain and wrote energetically of his travels in America; but by this time, the tide of enthusiasm for the new "science" was ebbing.

Had phrenology remained confined to the academic sphere it would very likely have died a neonatal death. This was not the case, however, for late in the 1830's it fell into the hands of a most energetic pair of students of human nature, the Fowler brothers: Orson Squire and Lorenzo Miles by name. To these two must go the credit for the Americanization of the essentially Old World doctrines of phrenology. And they lost precious little time in accomplishing this. Though educated at Amherst College, the two wasted no effort in the hinterland, but travelled straight to New York City and there established the Phrenological Cabinet, a garish settlement in which one might ponder the great skulls of the past while having one's own propensities and faculties explained.

The Fowlers were blessed with wives and sisters who quickly became imbued with the wonders of phrenology and lent valuable hands and lungs for the propagation of the faith. Their aim, set forth in the *American Phrenological Journal,* was "to phrenologize our Nation" in hopes that "it will thereby reform the world." And to this end, the brothers, their wives, their sisters and their sisters' husbands devoted their furious energy. They lectured and preached. They wrote and published. They organized and encouraged. They analyzed and phrenologized back and forth across the country. No institution, no sector of American life escaped their endeavors. A publishing house was established to handle their literature. Soon, the American Institute of Phrenology arose in New York, founded by the Fowlers to promote the practical side of phrenology and to train students of the science. A diploma from this institute was acknowledged by one alumnus to have raised him "50% in the estimation of the best people in every place he lectured."

The Phrenological Cabinet was expanded so that skulls or casts of skulls of all the ancient and modern greats could be exhibited there. From this central base the Fowlers and their emissaries swarmed over the countryside. In the Fowlers' hands, phrenology was expanded to include such diverse fields as love and parentage, matrimony, education, self-improvement, self-culture and perfection of character, heredity and descent, religion, temperance and memory, the tight lacing of corsets and the inevitable — sexual science. Advice was given, with or without request.

Much of the lay public was captured by this campaign, though the medical profession seems to have soon lost its zeal for phrenology once the Fowlers' rise to fame began. Indeed even the earlier, more scientific phrenologists such as Combe were not in accord with the popular movement of the Fowlers. Poor Spurzheim must have rolled over, headless, in his grave, for we are told by Capen that he "abhorred the idea of his science falling into the hands of quacks and charlatans." Even George Combe, for all that he deviated from the teachings of Gall and Spurzheim, found it impossible to embrace the Fowler clan.

Yet phrenology hung on, in ever more bizarre forms, until the last years of the 19th century. In its late years it was forced to combine forces with numerous unorthodox disciplines. Thus we find such unlikely bedfellows as phreno-magnetism, phreno-geology, phrenology and the water cure and andronomy or, as the purists would have it — *magneto-physiognomic-craniology!*

Gone, indeed, were the days when phrenologists would be received by Warrens, Quincys and Websters. The science was dead and the fad had become a farce; but the stimulus which had been given to neuroanatomy, neurophysiology and to the first stirrings of psychology cannot be questioned.

INTERNSHIP LIST

Name	*Hospital (and location)*	*Service*
Aaberg, Thomas M.	Minneapolis General, Minneapolis, Minn.	Rotating
Albright, Tenley E.	Beverly Hospital, Beverly, Mass.	Surgery
Almond, Douglas V.	Univ. of Pennsylvania, Philadelphia, Pa.	Rotating
Alterman, Morton A.	Beth Israel, Boston	Medicine
Altman, Ruben	George Washington Univ., Washington, D. C.	Mixed
Anyan, Walter R., Jr.	Strong Memorial, Rochester, N. Y.	Pathology
Appleton, William G.	Boston City (Tufts Service), Boston	Medicine
Avantaggio, Frank O.	Maine Medical Center, Portland, Maine	Rotating
Backman, John H.	Bellevue (3rd Div.-NYU), New York, N. Y.	Medicine
Benson, Herbert	King County, Seattle, Wash.	Medicine
Bibler, Darrel D., Jr.	King County, Seattle, Wash.	Surgery
Bigelow, Llewellyn B.	Univ. of Illinois Research & Educational, Chicago, Ill.	Rotating
Carpenter, Howard F.	Boston City (Harvard Service), Boston	Surgery
Carter, David M.	Strong Memorial, Rochester, N. Y.	Mixed
Challoner, David R.	Presbyterian, New York, N. Y.	Medicine
Cline, Allen L.	Buffalo General, Buffalo, N. Y.	Medicine
Cohen, Norman R.	Massachusetts General, Boston	Medicine
Connell, Michael L.	North Carolina Memorial, Chapel Hill, N. C.	Mixed
Covey, Thomas H., Jr.	University Hospital, Ann Arbor, Mich.	Surgery
Davidson, Mayer B.	Bellevue (2d Div.-Cornell), New York, N. Y.	Medicine
De Long, George R.	Boston City (Harvard Service), Boston	Medicine
Dohan, F. Curtis, Jr.	Bellevue (2d Div.-Cornell), New York, N. Y.	Medicine
Dow, John P.	Hartford Hospital, Hartford, Conn.	Rotating
Edelstein, Stephen G.	Cincinnati General, Cincinnati, Ohio	Rotating
Ellis, Jack T.	San Francisco Hosp., San Francisco, Calif.	Rotating
Ellis, William W.	Univ. of Virginia, Charlottesville, Va.	Medicine
Fearon, Richard E.	University Hospitals, Cleveland, Ohio	Medicine
Fischer, James J.	Division of Medical Sciences, Harvard Univ.	Pharmacology
Fischer, Josef E.	Massachusetts General, Boston	Surgery
Flescher, Robert	Boston City (Harvard Service), Boston	Medicine
Fraley, Elwin E.	Massachusetts General, Boston	Surgery
Frederick, Albert R.	Boston City (Harvard Service), Boston	Medicine
Fuglestad, Jules A.	Minneapolis General, Minneapolis, Minn.	Rotating
Gardner, Pierce	King County, Seattle, Wash.	Rotating
Gazzaniga, Alan B.	Peter Bent Brigham, Boston	Surgery
Ginsburg, Harold J.	Boston City (Tufts Service), Boston	Surgery
Grayer, Stephen P.	Peter Bent Brigham, Boston	Surgery
Grimm, Arthur R.	Roosevelt Hospital, New York, N. Y.	Mixed
Grommers, Frances J.	Internship postponed	
Guthrie, Randolph H.	New York Hospital, New York, N. Y.	Surgery
Hakala, Thomas R.	Massachusetts General, Boston	Surgery
Halgrimson, Charles G.	Colorado General, Denver, Colo.	Surgery
Hanschka, Mark R.	Univ. of Oregon Med. Sch., Portland, Oregon	Rotating
Harpel, Peter C.	Bellevue (2d Div.-Cornell), New York, N. Y.	Medicine
Himmelhoch, S. Ralph	Peter Bent Brigham, Boston	Medicine
Hoefle, Frank B.	Lenox Hill Hosp., New York, N. Y.	Rotating
Hoffer, Axel	Massachusetts General, Boston	Medicine
Holmes, James T.	Univ. of Washington, Seattle, Wash.	Surgery
Hurd, James R.	St. Louis City Hosp., St. Louis, Mo.	Surgery
Hyslop, Newton E., Jr.	Massachusetts General, Boston	Medicine
Johnston, Kent H.	University Hospitals, Cleveland, Ohio	Surgery
Keane, James R.	Bellevue (2d Div-Cornell), New York, N. Y.	Medicine
Keitt, Alan S.	Massachusetts General, Boston	Medicine
Kramer, Jeffrey	Bellevue (3rd Div.-NYU), New York, N. Y.	Medicine
Kriss, Fred C.	University Hospital, Ann Arbor, Mich.	Surgery
Lamb, Richard N.	University Hospital and Hillman Clinic, Birmingham, Ala.	Medicine
Lane, J. Michael	Internship postponed	
Lee, Glenn Y.	Boston City (Harvard Service), Boston	Medicine
Lees, E. Ann Mirabile	Mount Auburn Hospital, Cambridge, Mass.	Rotating
Leinbach, Robert C.	Boston City (Harvard Service), Boston	Medicine
Levenson, Alan I.	University Hospital, Ann Arbor, Mich.	Rotating
Lewis, David C.	Beth Israel, Boston	Medicine
Liebert, Peter S.	Peter Bent Brigham, Boston	Surgery
Loeb, John N.	Massachusetts General, Boston	Medicine
Lund, David A.	Univ. of Minnesota, Minneapolis, Minn.	Medicine

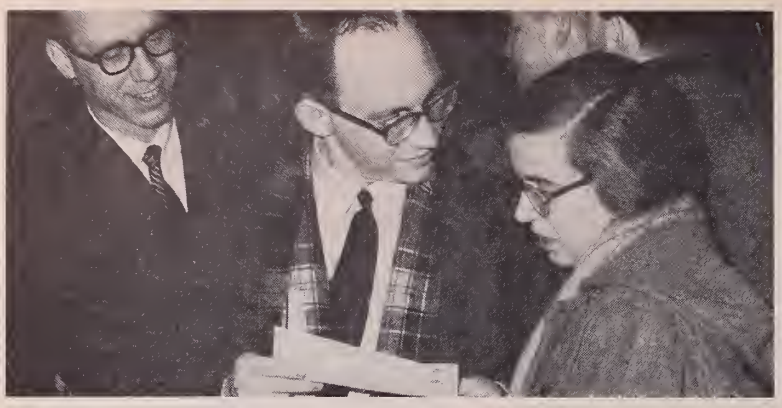
INTERNSHIPS

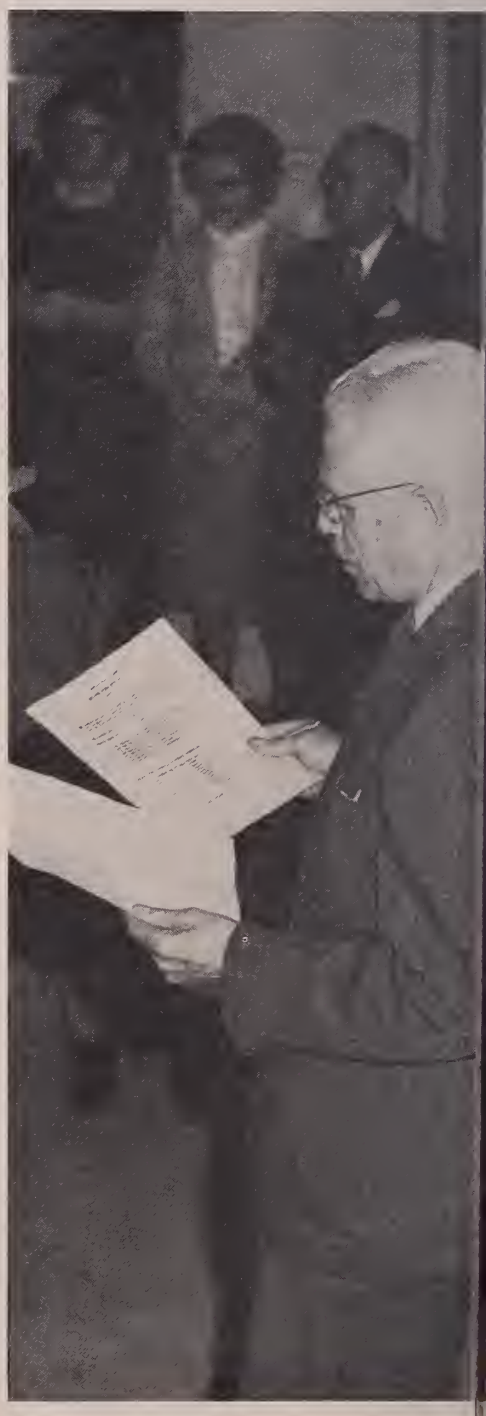
"There's many
slip 'twixt the cu
and the lip!"

Photos by Herman Goslyn

Population Control Project

1961





INTERNSHIP LIST (continued)

Name	*Hospital (and location)*	*Service*
Macht, Lee B.	Beth Israel, Boston	Medicine
Maxwell, John A.	Roosevelt Hosp., New York, N. Y.	Mixed
McGavic, John D.	Univ. of Washington, Seattle, Wash.	Surgery
McKeown, Michael J.	Univ. of Chicago Clinics, Chicago, Ill.	Rotating
Mertz, James J.	Peter Bent Brigham, Boston	Medicine
Miller, Ralph E., Jr.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Moldawer, Muriel E.	Bronx Municipal Hosp. Center, New York, N. Y.	Pediatrics
Moser, Royce, Jr.	New England Center, Boston	Medicine
Mosher, Loren R.	Univ. of California, San Francisco, Calif.	Medicine
Nee, Yeu Tsu	University Hospital, Ann Arbor, Mich.	Surgery
Nelson, Franklin S.	Boston City (Harvard Service), Boston	Surgery
Niceforo, John R.	Beth Israel, Boston	Medicine
Ockner, Robert K.	Boston City (Harvard Service), Boston	Medicine
Olson, Lloyd C.	Strong Memorial, Rochester, N. Y.	Pediatrics
Otto, William J., Jr.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Pareja, Nilo J.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Parkes, James C., 2d	Roosevelt Hospital, New York, N. Y.	Mixed
Poe, Richard O.	Univ. of Washington, Seattle, Wash.	Medicine
Polissar, Jan	Graduate School of Arts & Sciences	Biophysics
Randolph, Peter B. F.	University Hospitals, Cleveland, Ohio	Medicine
Reibel, Stephen P.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Rhine, Mark W.	King County, Seattle, Wash.	Rotating
Rife, Donald L.	Grace-New Haven Community, New Haven, Conn.	Pediatrics
Riley, Fenwick C., Jr.	Univ. of Oregon Med. Sch., Portland, Oregon	Rotating
Robb, George L.	Children's Hosp. Med. Center, Boston	Pediatrics
Robertson, Gary L.	Louisville General, Louisville, Ky.	Medicine
Robinson, E. Floyd	Jefferson Davis, Houston, Texas	Surgery
Rolde, Edward J.	Beth Israel, Boston	Medicine
Rose, Robert M.	Boston City (Tufts Service), Boston	Medicine
Rotner, Howard E.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Rubin, Martin L.	Rochester General, Rochester, N. Y.	Medicine
Sagebiel, Richard W.	King County, Seattle, Wash.	Medicine
Saginor, Mark L.	Univ. of California, Los Angeles, Calif.	Medicine
Scherl, Donald	Univ. of California, San Francisco, Calif.	Medicine
Schwartz, Arthur H.	Univ. of Illinois Research & Educational, Chicago, Ill.	Rotating
Seidl, Larry G.	Boston City (Harvard Service), Boston	Medicine
Sheft, Douglas J.	Boston City (Harvard Service), Boston	Medicine
Shein, Harvey M.	Children's Hospital Medical Center, Boston	Research
Shine, Kenneth I.	Massachusetts General, Boston	Medicine
Spiegel, Peter K.	Boston City (Harvard Service), Boston	Medicine
Springer, Wilbur J.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Steckel, Richard J.	Univ. of California, Los Angeles, Calif.	Medicine
Stein, John M.	New York Hospital, New York, N. Y.	Surgery
Stephans, James H.	King County, Seattle, Wash.	Medicine
Strasburger, Larry H.	San Francisco Hosp., San Francisco, Calif.	Rotating
Stratton, John P.	Cincinnati General, Cincinnati, Ohio	Rotating
Stryer, Lubert	Harvard University	Physics
Swenson, Wayne M.	Denver General, Denver, Colo.	Rotating
tenBensel, Robert W.	Univ. of Minnesota, Minneapolis, Minn.	Pediatrics
Thomas, William H.	Strong Memorial, Rochester, N. Y.	Surgery
Timothy, Robert P.	Strong Memorial, Rochester, N. Y.	Surgery
Vernon, James K.	University of Utah, Salt Lake City, Utah	Rotating
Warram, James H., Jr.	Strong Memorial, Rochester, N. Y.	Pathology
Weintraub, Ronald M.	Barnes, St. Louis, Mo.	Surgery
Welpton, Douglas F.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Wenlund, Dale E.	Massachusetts General, Boston	Surgery
West, Robert S.	U.S. Naval Hospital, Chelsea, Mass.	Rotating
Wheeler, Paul S.	Cleveland Metropolitan, Cleveland, Ohio	Surgery
Wheeler, Robert C., Jr.	Univ. of Virginia, Charlottesville, Va.	Medicine
Wilber, John F.	Peter Bent Brigham, Boston	Medicine
Wilson, Ivan D.	Univ. of Minnesota, Minneapolis, Minn.	Medicine
Yahr, William Z.	Presbyterian, New York, N. Y.	Surgery
Yerkes, Raymond C.	Beth Israel, Boston	Medicine
Young, Robert R.	Peter Bent Brigham, Boston	Medicine
Zawacki, Bruce E.	Massachusetts General, Boston	Surgery
Zimmerman, Clarence E.	Peter Bent Brigham, Boston	Surgery


PUSH
ERNEST
CRAIGE

CARTOONS BY ERNEST CRAIGE, '43A

Looking a

GIFT IN THE MOUTH

James H. Warram, '61
William W. Ellis, '61

Everybody loves a gift, and the medical student is no exception. We in the medical profession are indeed in a fortunate position; we have our personal Santa Claus in the form of the drug industry. This pleasant relationship is established early when as medical students we periodically receive little gifts, suggesting to us the good will of the pharmaceutical houses. It did not take us long to discover that, if we had the names of a few detail men, we could get free medicines. The Wives' Club soon found that they could get free baby food. Now, a particularly idealistic person might criticize this relationship between the drug house and the medical profession. However, for most of us this practice can conveniently be rationalized as financial aid from one of the few benefactors who recognizes the economic straits of the medical student.

We are all familiar with the list of things we receive: these include a percussion hammer, a little case for carrying drug vials, a pocket notebook, tuning fork, ruler, and even a little black instrument bag big enough to carry a baby bottle. A few of these are found to be useful acquisitions. (It is unfortunate that we did not receive the notebook until after most of us had purchased our own.) Other gifts went directly into the wastebasket. Of particular note was the book entitled *Trans-visions of Anatomical Chromographs,* which consisted of colored plastic transparencies of the human body. Although this arrived a year and a half after completing anatomy, its arrival is not as poorly timed as it might seem. The book would have been of no aid in studying anatomy as it was of no aid in studying pathophysiology. Yet, we rather enjoy the receiving of these things; after all, a gift is a gift. But, when we find that the articles are good only for the wastebasket, we have not only gained nothing, but our respect for the pharmaceutical industry has not been increased.

In addition to these gifts the pharmaceutical industry distributes a mass of publications and leaflets to the members of the medical profession, giving to them the latest advances in therapy. Medical students are unfortunately included on many mailing lists. The brightly colored

cover designs, the attractive pages, and the many illustrations do not compensate for the generally uninformative articles. Some articles are praiseworthy; however, we are not convinced that it is the proper function of the drug houses with their vested interests to teach medicine and clinical pharmacology.

These gifts and publications are innocuous enough and disturb only those of us who object to such "boxtop prizes" as being inappropriate and childish. However, if these gifts are innocent, it is because we see a biased selection, the Dean's Office having filtered out objectionable material. In comparison, at the medical school in one of our home states the drug companies sponsor "educational" tours of their home plants in four major cities. The students furnish their transportation; once they reach their destination all expenses, including hotel, meals and entertainment, are paid for by the hosting company. It is not reasonable to believe that either the students or the companies seriously believe that such trips constitute a significant contribution to medical education. No doubt they do contribute to the students' over-all sophistication, but this is hardly the proper concern of the pharmaceutical industry.

The money directed toward these various promotional programs does not represent a significant fraction of the total budget of drug promotion, let alone a significant part of the retail price of drugs. Nonetheless, as an isolated statistic it must represent a significant sum of money that could elsewhere be employed usefully. As a matter of fact several companies do have admirable programs beneficial to the medical student. Geigy publishes an excellent book of scientific tables. Squibb distributes copies of *The Physician and His Practice,* a series of essays by well-known physicians on practical aspects of medicine. Merck has provided a loan fund for interns and residents which is administered by the deans of the participating medical schools. Lastly, several companies provide fellowship money for students working on projects of their own selection.

In an attempt to encourage more programs of the sort just mentioned, a self-appointed committee of students wrote several drug firms concerning their handouts. We pointed out that the trivial pieces of equipment and pamphlets failed to attract the serious attention of the medical students and suggested that their efforts would be better appreciated if they were directed toward academic scholarship, summer research, and the purchase of textbooks.

From the replies which we received, several conclusions can be stated:

1. The drug companies go to considerable expense to publish their periodicals, and we should appreciate their efforts.
2. The gifts of equipment were selected after consultation with representatives of medical schools in order to determine "the most urgent requirements" (!) of medical students.
3. The drug companies would be delighted to have ar specific suggestions or criticisms we had to offer.

We also sent similar letters to student governments at dozen medical schools to ascertain what other studen think of such efforts at promotion. Unfortunately, w received only two replies. Of the dozen student goven ments we wrote to, one indicated that the letter had falle into the hands of kindred hearts; it is our understandir that they undertook the writing of a letter to the pha maceutical houses which would express their own view The reply from the other school agreed that curre advertising attempts offered little of educational valu Tongue in cheek, they defended the practices on tl grounds that "advertising is an essential part of our rel tionship with drug firms, and the student should l exposed to this at a point when academic surroundin can bolster his critical powers."

This second correspondent was opposed to scholarsh or research funds supplied by drug companies, feeling th this might tend to obligate students to the companies. H failed to recognize, however, the fact that other industri subsidize education without obligating students in a way. There is an ever increasing need for aid to medic education; and, although the needed sum is far great than the drug industry can supply, we would argue th they do have a very definite responsibility to medical ed cation. The trivia distributed by the drug compani should not be accepted as substitutes. They should encouraged by our present refusal of their offering make more positive contribution to the furtherance improved medical education.

(continued from page 21)

One of the other ideas dear to the hearts of the ommittee was that the student would find more time nd more incentive to read in the original literature under his program than was true under the old one. In this espect, the anticipations of the committee appear to ave been fully justified. This is especially true for students n the second semester of each year. According to the brary, the number of student readers from the first two ears has increased 4 or 5 fold since the institution of he program. The students are interested in reading origi- al articles pertinent to the lecture material and to the xperiments which they perform in the laboratory. In ddition to reading done in the library, books and re- rints of pertinent articles are available to the students n the laboratory and are avidly read.

t would hardly be fair to suggest that these arrange- ments have been without problems. Indeed, the reverse as been the case. The matter of Faculty time involved n teaching is one of these problems. Although the total mount of time required of a given faculty member for aching is not very different than it was under the old stem, the amount of time required in committee meet- gs devoted to the planning and organization of in- grated teaching is considerable. During the first year, ch meetings consumed a very large part of the time certain Faculty members charged with major respon- bility in this organization. In subsequent years, thanks to ast experience, the amount of time spent in adminis- ative detail has been somewhat reduced. Nevertheless, remains in excess of that which was required, at least the younger faculty member, in the past.

Another problem frequently mentioned is the difficulty hich Faculty members experience in getting to know dividual students with whom they have contact for nly a few weeks instead of at intervals throughout the ar. Even though one may see a student as part of a oup daily for four or five weeks, it is more difficult come to know them as individuals with hopes and pirations of their own. For the students, this problem ay be somewhat obviated by the presence of tutors with hom they meet at weekly intervals in groups of five. n the other hand, the tutors have in general been drawn om the ranks of the younger clinicians and do not teach the basic-science courses. The continuing impact of e teacher upon the student is somewhat mitigated and ne of the real strengths of the teaching relationship may ve been partly sacrificed in the interests of developing integrated approach to learning.

The students often complain of something else. "It all very well to have lecture after lecture delivered by fferent people, each of whom is an expert in his own ld and seeks to tell you all he knows in 60 minutes. owever, the Faculty ought to realize that, while it may ve in its ranks experts in almost every field and one man would not think of invading the field of another, it is a little hard on the student to expect him to be an expert in *all* fields, when the faculty doesn't expect it of itself." Just how to solve this problem is a hard question to answer. It is all too human for the man who has only a brief period in which to make his favorite subject fascinating and clear to attempt to cover his whole field in the time assigned him. Although everyone seems to be well aware of this difficulty, no one has yet come up with a really satisfactory solution. In the meanwhile, the students continue to be stuffed with intellectual food, until like the Strasbourg goose they often regurgitate without digestion.

A final problem should be mentioned for those who might be contemplating similar changes in other schools. The implementation of this program has been expensive in two areas. New equipment was necessary in order to do a variety of new experiments, various other teaching materials needed to be bought, laboratories rearranged, proper animal facilities supplied, and so forth. A second item of "expense" while perhaps not directly financial in the long run eventually becomes so. This is the matter of faculty time. There is no question that integrated programs require many instructors and mean changes in the time arrangements of many faculty members. It is relatively easy for a member of one of the basic science departments to arrange six consecutive weeks during which he devotes his entire time and effort to teaching in exchange for his freedom during the rest of the year. However, making such arrangements is not nearly so simple for members of such Departments as Pathology and Medicine, whose responsibilities in hospitals or practice cannot be laid aside completely for such a period.

Any observant reader will note that I have with some care avoided supplying a categorical answer to the most important question of all, namely: Are the students better prepared by this system than they were under the old one? As I pointed out earlier, this question is almost impossible to answer since there are no controls in this experiment, nor can there ever be any. All that can be done is to report personal impressions and the comments of others. These must be evaluated in the context of those who make them, and in the circumstances in which they are made.

From the point of view of the clinicians, who receive these students for their clinical education in their third and fourth years, the impression seems to be common that the students coming through this program are better prepared, or at least appear to know more facts than their counterparts in the past. This is not surprising. The students now read more, especially in the original literature, and much material previously covered in the third year lectures is dealt with in relationship to the pertinent pathology in the pathophysiology course of the second year.

The much more important question of whether the students have a better grasp of fundamental principles

on which to build their future growth in medicine is far more difficult to answer. Indeed, it seems doubtful that it can be answered until graduates of this program have had the opportunity to prove themselves in careers in the medicine of the future — by which time, everything will probably have changed so much that comparison will be impossible. From the point of view of the basic scientist who seeks to create so strong a feeling for his field that the student will select it for his career after graduation, the success of the program cannot be even guessed as yet. Not enough time has elapsed for the products of the new arrangements to show their hand in this respect.

To conclude this backward look, a few general comments seem advisable. It is obvious that one cannot categorically say this system is better than the old. Nor can one say it is worse. Certain hopes have been realized — others have been impossible to achieve. Some benefits seem to have accrued from the change at the cost of the appearance of new problems. Whether these benefits result from the specific pattern of the new teaching arrangements or whether they are the result of the very fact that the Faculty took the necessary time and made the necessary effort to examine its teaching in detail — these questions will never be answered. Thus, in the end one comes down to the reaction of the individual. I will give you mine — I like it. These arrangements seem to offer opportunities for change and development in teaching to keep pace with changes in knowledge. More opportunities for the student to explore his individual intellectual interests seem to have been made available. The students seem to enjoy themselves especially in the integrated exercises. They appear to read widely and with understanding. Finally, teaching in the integrated exercises with the opportunity it supplies to work with people of varying interests is enjoyable, stimulating and rewarding. When one couples these facts with a student body of a quality second to none, is there any wonder I am enthusiastic?

* * *

(continued from page 7)

July 3, 1943

Most interesting day, in that one of our men stationed at Beleek was seriously injured by an accidental tommy-gun shot. There being no U.S. doctor within thirty miles, the local doctor took him ten miles across the border to the hospital at Bally Shannon. The General and our Consul in Belfast, as well as our Minister in Dublin, called up about it. None of them would tell me to go and get him out of South Ireland, but it was obvious they wanted me to do it.

I took the jeep and an ambulance and drove eighty miles to Beleek. Here the inspector of the Royal Ulster Constabulary met me; also the local doctor. They assured me all I needed to do was put on a tweed cap and a tweed overcoat which they lent me, and I went over in his car. I asked about the ambulance and my driver and they said, "Oh, we'll get him a tweed coat, too," so the ambulance followed me apparently well-disguised in that the driver had on a tweed coat. The lettering, "U.S. Army" two feet high, created only amusement to both North and South Ireland guards. Went to the hospital at Bally Shannon. Found the patient had a gun-shot wound entering just below the left mastoid and came just under the zygoma on the right. Why it didn't kill him, I will never know. He was in fair shape and I brought him back to Belfast without any great trouble and instituted treatment. He stood the trip well, the only positive finding being a slight left facial paralysis.

July 20, 1943

All day at H.Q. on hospitalization plans for next fall and winter, the "Bolero" plan, which will be the build-up for "Overlord."

August 2, 1943

Someone in the detachment acquired two lobsters. The E.M. came from Iowa and didn't know how to cook them. I had rather a good time going down and cookin the lobsters. They didn't taste quite like ours.

Directive from H.Q. about Christmas mail, which seem very early, but already there are signs of fall here in Nort Ireland. Summer comes early here and goes early.

Patient whom we sent back to the U.S. two weeks ag as a Neuropsychiatric, was not so dumb as we though The Red Cross called up and I find he has sold his bicyc to two different people, collected the money from both them, but neither one has the bicycle.

September 5, 1943

Good trip. Made my regular from North Ireland London. Had supper with Harry Pratt at the new office club in Park Lane. Walked around in the evening wi him and went to the Churchill Club of which I have ju been made a member and had some corn on the cob. wasn't very good and it cost two shillings per ear and the was no butter, but it was fun to eat it.

Short alert about 3:30 a.m. I got up and was wande ing around to see what was to be seen and Harry hea my dog tags jingle and made his classical remark abo the noise; "I wish you would take off those damn cow be and let me sleep."

September 6, 1943

Pleasant breakfast. Was walking back to the 16th h stopped to watch them change the guard at the Pala This is really quite a sight, particularly so as I got a salu from the guard. Also, the King of Norway was just lea ing the Palace and he returned my salute.

October 18, 1943

Up early and down to the docks to meet the 7 General. In the afternoon, the 2nd Division arrived the docks. It was a most impressive ceremony of greeti by the British. The Duke was there and a representative the general staff and a great entourage of dignitaries. stood beside the British General's aide. He was a v

ignified guardsman, the type one would hesitate to speak
unless properly introduced. The British General's speech
as rather long and rather full of "blood-thicker-than-
ater stuff." I couldn't hear it very well and I was ob-
iously trying to as I stood there. When he was through,
is aide turned to me and again demonstrated how the
ritish will fool you. His face lighted up with the most
leasant smile and he said in a whisper, "I couldn't hear
ie old boy either, but I know it was all bally rot."

ecember 29, 1943

Had our own Christmas dance. I told the nurses to
it on civilian clothes if they wanted to. They all did,
id it is quite extraordinary how it bucks up their morale
id puts them in a very cheerful mood.

The General was there and in a very cheerful
ood, too. He asked me how I allowed the nurses to be
it of uniform, but I had my answer all ready for him
id told him that it was my understanding that a C.O.
uld prescribe the suitable uniform for any occasion "on
e post" and that I felt that this came under the head of
ganized athletics and that the nurses should be properly
essed for it.

I don't believe I would have gotten away with it, except
really thinks I haven't done a bad job here and he had
o had a couple of our very good cocktails.

:cember 30, 1943

Office work all morning and in the afternoon, went to
e children's wing of the Royal Victoria and performed
Santa Claus for the children. It was very good fun.
ie local press was there and took pictures of me, but I
s well-disguised with my costume. Had a pleasant tea
th the trustees afterwards. Did not sit up for the New
ar, although I was awake and heard a good deal of it
1 o'clock.

uary 9, 1944

Had dinner at H.Q. with General Lee. It was really
her amusing as Mr. Grey, our minister in Dublin was
re. He is Harvard College Class of '91 and knew my
her. He asked for a half hour's conversation "alone"
h me and I think the generals all thought I was getting
real low-down on the State Department and they
ated me with the most extraordinary respect at dinner.
ually, all Mr. Grey wanted to talk to me about was my
ner, friends in Cambridge, and his rheumatism. Still it
sn't do any harm to have the high military officers
eve that you are hand-in-glove with the State Depart-
it at Washington. Anyway when I came back from my
, they had moved my place at the lower end of the
e right up among the Brass. (and me a Colonel and
. at that)

uary 17, 1944

ur 10th Station Hospital has been transferred to Eng-
l. Up early, 4 a.m. First echelon, left for England
the LMS. Everything went well. I wish I could
ch the faces of soldiers entraining, particularly in the
light of a station that has been bombed.

SOUTHERN ENGLAND

May 15, 1944

Got my orders to report as Surgical Consultant for the newly established 12th Hospital Center. I will have to cover 15-odd U.S. hospitals of Southern and Western England base sections. (Very glad to be relieved at last of the duties of a C.O.)

September 15, 1944

We are beginning to get a fair number of cases of combat exhaustion. Poor devils, I don't blame most of them, but I wish some of these NP boys would realize that all of them are not just pure NP. They had a patient at the 93rd, a regular Army sergeant with fifteen years' service they were treating as an NP because he couldn't seem to eat, and his gastric ulcer perforated early this morning.

December 24, 1944

Sunday. Worked in the office all day. Christmas carols in the street after supper. News from the Continent is not so good. "The Bulge." That and the season made it a rather homesick evening.

January 7, 1945

All day with Sir Alexander Fleming, who gave us an excellent talk in the evening on penicillin. He is an extraordinary person with a wonderful sense of values and of humor. He predicted that the Americans would soon have penicillin chewing gum and he is darn near right, too.

May 2, 1945

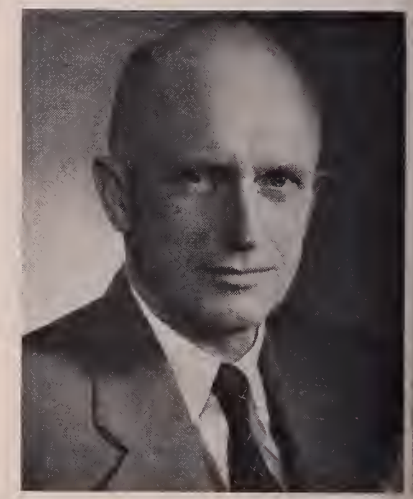
Caught the 1:40 for London. Did some shopping. In the afternoon, stopped at the officers' club, where there was a big crowd and found that the Queen and Princess Elizabeth were inside, so I stuck around until they came out, as I had never seen them. She is a most charming-looking person.

The news is wonderful, and I am tempted to stay over, just in case they say the European war is over. Walked around Hyde Park corner after supper and listened to the soap-box orators. I have not done this since the V-I days. It is a great relief to walk around and not think and look for where you had better duck into if you hear them coming.

May 22, 1945

This hospital will be the last one to close, as so many are nontransportable. Heard that the 55th, which I wished to keep open the longest, will be the first in this area to move. How very like the Army. Sat in the sun outside the Swan Tavern with Dick and Watson and watched the heavy bombers going west. There are a lot going home by air now. I was told I had orders for air transport back on July 5th.

Sylvester Baker Kelley, '29, practices urology in Boston, Massachusetts. A clinical associate in surgery at Harvard Medical School, he is also visiting urologist at the Massachusetts General Hospital. He is a member of the American Urological Association and the Boston Surgical Society.

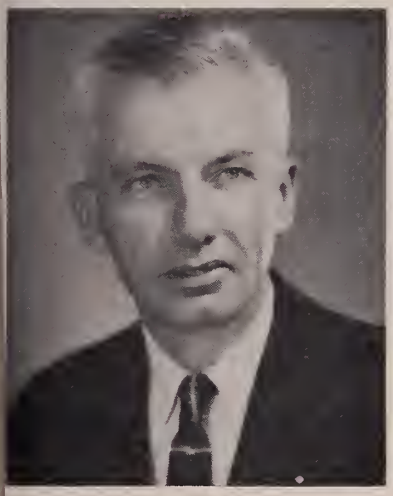


Augustus Steele Rose, '32, is professor of neurology at the University of California at Los Angeles. He is president of the American Academy of Neurology; a member of the American Neurological and American Psychiatric associations, the North Pacific Society of Neurology and Psychiatry and the Association for Research in Nervous and Mental Disorders; and is director of the American Board of Psychiatry and Neurology.

David Hale Clement, '35, practices pediatrics in New Haven, Connecticut. An associate clinical professor of pediatrics at Yale School of Medicine, he is also attending pediatrician at the Grace-New Haven Community Hospital. He is a member of the American Pediatric Society, the American College of Physicians and the New England Pediatric Society; a Fellow of the American Academy of Pediatrics; and Examiner on the American Board of Pediatrics.

CANDIDATES

62



ROBERT KUHNEN BROWN, '37, has his practice of thoracic surgery in Denver, Colorado. He is also associate clinical professor of thoracic surgery at the University of Colorado Medical School. His memberships include the American Association for Thoracic Surgery, the American Trudeau Society, the American Board of Surgery, and the Board of Thoracic Surgery.

DAVID MCLEAN GREELEY, '37, is chief of clinical services at the Harlan Memorial Hospital, Miners Memorial Hospital Association, in Harlan, Kentucky. The former assistant dean and associate professor of pediatrics (1951-1955) at Boston University School of Medicine, he is a member of the American Academy of Pediatrics and the American Public Health Association.

EARLE WAYNE WILKINS, JR., '44, is associate surgeon to the University Health Services at Harvard University. An instructor in surgery at Harvard Medical School, he is also visiting surgeon at Pondville Hospital, associate visiting surgeon at the Massachusetts General Hospital, and surgeon, senior active staff, at the New England Deaconess Hospital. He holds memberships in the Boston Surgical and New England Surgical societies, and in the American Association for Thoracic Surgeons.

ALUMNI NOTES

1902

Fletcher Hodges recently returned from a trip to Hawaii on the Matson Liner *S.S. Lurline*. While they were there they took flights among the Islands. The Hodges have 10 grandchildren and were proud to announce the birth of their first great-grandchild, Jessica Janes Tracy, daughter of Robert and Rebecca Tracy.

1903

Edward M. Halligan is still going strong with a G.P. practice "so rare nowadays." His grandson, Edward M. Haley, '58, is doing anesthesia at the Strong Memorial Hospital in Rochester, New York.

Daniel B. Reardon writes: "My grandson, Daniel B. Reardon, is now a freshman at Harvard College, and so my namesake continues the family tradition."

1905

Norman M. MacLeod retired as Health Commissioner of Newport in June, 1958. Unfortunately, in September, 1958, he had an automobile accident that has limited his activities.

1908

From **Isaac Hartshorne**: "If still alive on July 11, 1961, I will have completed 50 years of practice in ophthalmology in New York City."

Albert S. Tenney announced at the October, 1960, meeting of the Harvard Medical Society of New York his forthcoming marriage to a nurse who graduated from the Columbia Presbyterian School of Nursing in 1951. "Admiring applause and encouragement met this statement."

1909

F. Gordon Brigham writes: "I have been an invalid since January, 1955, when I had a cerebral thrombosis. I have no use of my hands or legs, but my brain is still clear, thank God. I enjoy letters from friends and patient-friends, and have a secretary who answers them for me. I continue to be interested in everything concerning Harvard Medical School."

Albert W. Ghoreyeb writes: "I, the class baby, am now 75½ years old." He has had a hard year having had cataracts removed from both eyes and a tumor removed from his thyroid. (We hope he is all right now! Ed.)

Donald Macomber recently returned from a freighter cruise around the world.

1912

Whitman K. Coffin is "virtually retired but not formally so."

1913

Harold M. Frost reports: "Nothing remarkable." He continues to have an active rural general practice on a full-time basis in Friendship, Maine.

Lewis W. Hill still has an active practice in pediatric allergy in Boston. "It is very well adapted to an old man, as I don't have to go out of the office," he adds.

Oswald **H. Robertson** writes that he is still actively engaged in the study of the nature of the post-spawning death of Pacific salmon. These fish develop, he informs us, hyperadrenocorticism to a marked degree and exhibit a Cushing-like syndrome during the latter part of their life cycle. Field trips to Oregon, Utah, Idaho and various picturesque regions of California add zest to this search which is constantly turning up new aspects for investigation.

1914

Carl Binger authored an article in the *Atlantic Monthly* last February on the "Emotional Problems of College Women." Honorary Physician at the Massachusetts General Hospital, he was recently named visiting professor of psychiatry at the University of Cincinnati Medical School, which requires his attendance there twice a year for 3 days at a time.

1917

From **Marshall C. Cheney**:
"Healthy,
Full-time work and writing some,
and painting some."

1919

Hugh G. Rowell is retired and following a hobby of genealogy. He calls himself "a doctor of family skeletons, professionally." He is official genealogist to the Pell Family Association, President of the Order of Americans of Armorial Ancestry and state officer of other patriotic-genealogical groups. He also maintains "the Massachusetts Genealogical tradition of collecting early clocks and circusiana."

Bartlett C. Shackford continues to practice pathology in Long Beach, California. He has two grandchildren.

1921

Jean A. Curran spent three months in 1960 on a study of higher education in Korea. His main duties were appraisals and recommendations on education, research and related forms of health service.

Constance MacDonald, daughter of **Maxwell E. MacDonald**, received her M.D. degree from Boston University in 1960. She is now interning at the Jefferson Davis Hospital in Houston, Texas, and plans to do her residency in pediatrics at the Charity Hospital in New Orleans.

Paul B. Shuey writes that he is "representing one of the few families who did not tour Europe this summer." The Shueys "found the simple pleasures of golf, trout and deep-sea fishing, regional island-hopping and photography in the delightful surroundings of Prince Edward Island."

1922

Hamilton Montgomery was honored by the Mayo Clinic which recently announced a special grant, created in his name, for a year of graduate study in certain skin diseases. An internationally recognized dermatologist, he is *emeritus* consultant in dermatology at the Mayo Clinic and *emeritus* professor of dermatology at the Mayo Foundation, Graduate School, University of Minnesota.

1923

Edward L. Bortz received the Gold Medal in the field of geriatrics in 1959 and is president of the American Geriatrics Society for 1960-61.

From **Shepard Krech**:
"Still smoking.
Feet are cold.
No more golf.
Just getting old."
He announced the birth of his 15th grandchild (of which he might have been feeling the effects. — Ed.)

1924

Kenneth E. Appel was honored by the trustees of the University of Pennsylvania when they dedicated the new Laboratory of Research and Psychiatry to him.

Norman W. Elton is back in the "humble pursuit of civilian practice" after retirement from the Armed Forces in 1957. He is at the Binghamton General Hospital in New York. He has two doctor sons and reports the expectation of the status of Gramp VII "before 1961 is out."

1926

Stanley J. G. Nowak was named "Man of the Year" by the National Medical and Dental Association of America.

1927

Chester M. Kurtz is finishing his second year as manager-director of the professional services and the Fort Bayard Veterans Administration Hospital. He reports the climate "ideal," the work "pleasant," and the salary "adequate, but will never make him a millionaire."

James L. Sagebiel and his wife enjoyed a trip around the world last summer with the Eastern Psychiatric Research Association which took them to Tokyo, Bangkok, New Delhi, India and Israel. Unfortunately, in his absence, his office building burned down and he is now in the process of rebuilding it. He is happy to report, however, that there were no casualties and his records were saved. (We admire his attitude. — Ed.)

1928

Roger D. Baker, now president of the